Practical Laboratory Andrology

An authoritative account of the causes of infertility that fully explores the clinical assessment of patients and covers the decision-making behind treatment options. The content follows the MRCOG syllabus as well as delving deeper into subjects covered by the RCOG Advanced Training Skills Modules (ATSMs), leaving readers well prepared for their examinations. Written by nationally recognised leaders in the field, this volume concisely reviews contemporary clinical practice. Using an aetiology-based approach, chapters discuss ovulatory dysfunction, endometriosis, male infertility, uterine/tubal factors and unexplained infertility. The increasing use of third-party reproduction and surrogacy is explored, along with the psychosocial aspects of this type of treatment. Ethical dilemmas surrounding reproductive medicine and their management are covered in depth. With an emphasis on practical approaches to the delivery and organisation of clinical and laboratory services, readers learn how to ensure the support and care they offer is of the highest quality.

This practical manual on sperm analysis presents the diagnostic and therapeutic procedures that are used in andrology laboratories to analyze and assess male infertility. Diagnostic areas include: semen analysis and the biochemical, immunological and microbiological examination of human semen and spermatozoa; computer-aided sperm motility analysis; sperm ultrastructure; and assessment of sperm transport through the female tract and sperm fertilizing ability. The clinical relevance of various diagnostic procedures is also discussed. Therapeutic topics include sperm washing techniques, semen cryopreservation, and insemination procedures. The volume also covers safety in the andrology laboratory, technician training, and quality control. The text is extensively illustrated and will be an invaluable resource to all scientists and technicians who diagnose male infertility. It will also be of interest to researchers working in human gamete biology and reproductive physiology. The detailed methods described in the book are relevant to all hospital, commercial, and university laboratories involved in infertility diagnosis and treatment.

Bringing together the latest information on the organization, management and quality of in-vitro fertilization (IVF) units, this is the first true field guide for the clinician working in assisted reproductive technologies (ART). Divided thematically into four main sections, part one discussed the establishment and organization of the IVF unit, including location, design and construction, practical considerations for batching IVF cycles, and regulations and risk management. Part two, the largest section, covers the many aspects of overall quality management and its implementation – staff and patient management, cryobank and PGD/PGS management, and data management – as well as optimization of treatment outcomes and statistical process control analysis to assess quality variation. Part three addresses the relationship between IVF units and society at large, including the ethics of IVF treatment, as well as public/low-cost and private/corporate IVF units. Advertising and marketing for IVF units is discussed in part four, including the building and managing of websites and the use of traditional print and social media. With approximately five thousand IVF units worldwide and a growing number of training programs, Organization and Management of IVF Units is a key resource for clinic directors, unit managers, embryologists, quality experts, and students of reproductive medicine and clinical embryology.

This is a reference manual for daily use in the Reproductive Medicine or Andrology laboratory, which goes beyond the literature available in the scientific journals by compiling insights into a detailed and applied clinical approach. All established practitioners in Reproductive Medicine will find much of practical relevance about the latest insights into sperm selection and analysis.

This essential survival guide for successfully managing the modern-day IVF clinic condenses a wealth of expertise and experience from the authors in troubleshooting and implementing quality management in the IVF laboratory. With high-profile media coverage of mistakes at IVF clinics, and escalating regulatory scrutiny, there is increasing pressure for professional accreditation. Modern accreditation schemes, which are largely based on the principles of ISO 9001 and related standards, require Quality Systems. Yet quality management beyond basic assay quality control is often poorly understood by biomedical scientists outside clinical chemistry laboratories. Quality and risk management are thus becoming hot topics for those working in IVF clinics and this book brings together, for the first time in one place, the basics of these essential aspects of laboratory management. The focus on taking a holistic approach to 'prophylactic management' - prevention rather than cure - will be welcomed by all scientists working in IVF.

The first training manual for new staff working in BSL3/4 labs. This guide is based on a course developed in 2007 by the EU COST action group 28b which serves as a standard for many courses BSL3/4 training courses worldwide. The four-day course consists of lectures and practical training with the lecturers covering all the different possibilities of organising a BSL-3/4 lab including the adaptation to the local requirements of biosafety, safety at work, and social regulations. This book covers bio-containment, hazard criteria and categorisation of microbes, technical specifications of BSL-3 laboratories and ABSL-3 laboratories, personal protective gear, shipping BSL-3 and BSL-4 organisms according to UN and IATA regulations, efficacy of inactivation procedures, fumigation, learning from a history of lab accidents, handling samples that arrive for diagnostic testing and bridging the gap between the requirements of bio-containment and diagnostics. Course participants can not only use the book for their actual training event but it will remain a useful reference throughout their career in BSL3/4 labs.

"This practical handbook covers the procedures that are undertaken in andrology and ART laboratories to analyze and assess male-factor subfertility, and to prepare spermatozoa for use in assisted conception therapy. Each section includes a brief, authoritative overview of the relevant biological background plus detailed, step-by-step descriptions of relevant analytical procedures. Technical sections include pertinent quality control considerations, as well as the optimum presentation of results. In addition to the basic semen examination, techniques are provided for computer-aided sperm analysis and sperm functional assessment, as well as for the biochemical evaluation of seminal plasma and spermatozoa, and the detection of antisperm antibodies. The interpretation of laboratory results in the clinical context and safe laboratory practice are emphasized throughout the handbook. The handbook is intended to be a resource to scientists and technicians who perform diagnostic testing for male-factor subfertility, including ART laboratories, and also for clinicians who use these test results to manage both general infertility and ART patients"--

The new edition of this canonical text on male reproductive medicine will cement the book's market-leading position. Practitioners across many specialties - including urologists, gynecologists, reproductive endocrinologists, medical endocrinologists and many in internal medicine and family practice – will see men with suboptimal fertility and reproductive problems. The book provides an excellent source of timely, well-considered information for those training in this young and rapidly evolving field. While several

recent books provide targeted 'cookbooks' for those in a male reproductive laboratory, or quick reference for practising generalists, the modern, comprehensive reference providing both a background for male reproductive medicine as well as clinical practice information based on that foundation has been lacking until now. The book has been extensively revised with a particular focus on modern molecular medicine. Appropriate therapeutic interventions are highlighted throughout.

?This concise, truncated version of Nagy, Varghese and Agarwal's Practical Manual of In Vitro Fertilization is comprised of select practical chapters for a portable, affordable and up-to-date resource. Building and Managing an IVF Laboratory covers a variety of topics, including: - Setting up and running an IVF laboratory - IVF laboratory equipment and culture systems - Organization of the IVF unit - Licensing and regulation in the ART laboratory - Quality control and troubleshooting Practical for both clinicians and researchers alike, Building and Managing an IVF Laboratory brings together all of the need-to-know information about these important topics in reproductive medicine.

Practical Laboratory AndrologyOxford University Press on Demand

This book serves as a manual of research techniques for electrochemically active biofilm research. Using examples from real biofilm research to illustrate the techniques used for electrochemically active biofilms, this book is of most use to researchers and educators studying microbial fuel cell and bioelectrochemical systems. The book emphasizes the theoretical principles of bioelectrochemistry, experimental procedures and tools useful in quantifying electron transfer processes in biofilms, and mathematical modeling of electron transfer in biofilms. It is divided into three sections: Biofilms: Microbiology and microbioelectrochemistry - Focuses on the microbiologic aspect of electrochemically active biofilms and details the key points of biofilm preparation and electrochemical measurement Electrochemical techniques to study electron transfer processes - Focuses on electrochemical characterization and data interpretation, highlighting key factors in the experimental procedures that affect reproducibility Applications - Focuses on applications of electrochemically active biofilms and development of custom tools to study electrochemically active biofilms. Chapters detail how to build the reactors for applications and measure parameters

Extensively illustrated handbook covering the procedures that are undertaken in andrology and ART laboratories to analyse and assess male-factor infertility.

This totally revised second edition is a comprehensive volume presenting authoritative information on the management challenges facing today's clinical laboratories. Provides thorough coverage of management topics such as managerial leadership, personnel, business planning, information management, regulatory management, reimbursement, generation of revenue, and more. Includes valuable administrative resources, including checklists, worksheets, forms, and online resources. Serves as an essential resource for all clinical laboratories, from the physician's office to hospital clinical labs to the largest commercial reference laboratories, providing practical information in the fields of medicine and healthcare, clinical pathology, and clinical laboratory management, for practitioners, managers, and individuals training to enter these fields.

ART treatment is vulnerable to the hazard of potential infection from many different sources: patients, samples, staff and the environment. Culture of gametes and embryos in vitro provides multiple targets for transmission of potential infection, including the developing embryo, neighbouring gametes and embryos, the couple undergoing treatment and other couples being treated during the same period. This unique situation, with multifaceted opportunities for microbial growth and transmission, makes infection and contamination control absolutely crucial in the practice of assisted reproduction, and in the laboratory in particular. Originally published in 2004, this practical book provides a basic overview of microbiology in the context of ART, providing a guide to infections in reproductive medicine. The relevant facets of the complex and vast field of microbiology are condensed and focused, highlighting information that is crucial for safe practice in both clinical and laboratory aspects of ART.

"...this substantial and engaging text offers a wealth of practical (in every sense of the word) advice...Every undergraduate laboratory, and, ideally, every undergraduate chemist, should have a copy of what is by some distance the best book I have seen on safety in the undergraduate laboratory." Chemistry World, March 2011 Laboratory Safety for Chemistry Students is uniquely designed to accompany students throughout their four-year undergraduate education and beyond, progressively teaching them the skills and knowledge they need to learn their science and stay safe while working in any lab. This new principles-based approach treats lab safety as a distinct, essential discipline of chemistry, enabling you to instill and sustain a culture of safety among students. As students progress through the text, they'll learn about laboratory and chemical hazards, about routes of exposure, about ways to manage these hazards, and about handling common laboratory emergencies. Most importantly, they'll learn that it is very possible to safely use hazardous chemicals in the laboratory by applying safety principles that prevent and minimize exposures. Continuously Reinforces and Builds Safety Knowledge and Safety Culture Each of the book's eight chapters is organized into three tiers of sections, with a variety of topics suited to beginning, intermediate, and advanced course levels. This enables your students to gather relevant safety information as they advance in their lab work. In some cases, individual topics are presented more than once, progressively building knowledge with new information that's appropriate at different levels. A Better, Easier Way to Teach and Learn Lab Safety We all know that safety is of the utmost importance; however, instructors continue to struggle with finding ways to incorporate safety into their curricula. Laboratory Safety for Chemistry Students is the ideal solution: Each section can be treated as a pre-lab assignment, enabling you to easily incorporate lab safety into all your lab courses without building in additional teaching time. Sections begin with a preview, a quote, and a brief description of a laboratory incident that illustrates the importance of the topic. References at the end of each section guide your students to the latest print and web resources. Students will also find "Chemical Connections" that illustrate how chemical principles apply to laboratory safety and "Special Topics" that amplify certain sections by exploring additional, relevant safety issues. Visit the companion site at http://userpages.wittenberg.edu/dfinster/LSCS/.

This reference work on andrology begins with a discussion of male infertility. It discusses genetic causes, conventional treatment, non-surgical methods for sperm retrieval, and assisted reproduction techniques. It also covers andrological endocrinology with chapters on clinical investigation and laboratory analysis in male hypogonadism, as well as testosterone deficiency syndrome. Additional topics include urogentical infections and STDs, erectile dysfunction, psychological abnormalities of male sexual function, and reproductive cancers. The book emphasizes contemporary concern for evidence-based practice, minimizing interventions, and promoting male reproductive health.

An easy to read, practical description of the human IVF laboratory, from laboratory start-up and training to complex, specialized procedures.

In the last decades, major advances have been made in assisted reproductive technologies (ART) and the public demand for these procedures has increased globally. All ART clinics, from those just starting out to the well established, must employ the latest equipment and implement the best practices, while ensuring that their resources are effectively engaged to optimize patient outcomes. This is a tenet of the fiduciary role of physicians and it is increasingly recognized as a quantifiable goal regulated by formal certifications and accreditations. Quality management protocols such as those proposed by the International Organization for Standardization (ISO) are being rapidly adopted as standards of measure. Quality Management in ART Clinics: A Practical Guide provides easily adoptable ways to implement and improve formalized quality management systems. Essential to any clinic to achieve best practices and maintenance of formal regulatory certifications, this book brings together the know-how of experienced opinion leaders operating in key areas worldwide. The book offers an overview of primary regulations in the ART field, with attention to quality management demands, and links specific requirements to practical steps for implementation. Filled with

process and procedure examples, flow diagrams and administrative form templates, this book is the first of its kind, gathering the necessary elements for optimizing practice, management, and quality assurance.

Human Assisted Reproductive Technology: Future Trends in Laboratory and Clinical Practice offers a collection of concise, practical review articles on cutting-edge topics within reproductive medicine. Each article presents a balanced view of clinically relevant information and looks ahead to how practice will change over the next five years. The clinical section discusses advances in reproductive surgery and current use of robotic surgery for tubal reversal and removal of fibroids. It looks into the refinement of surgical procedures for fertility preservation purposes. Chapters also discuss non-invasive diagnosis of endometriosis with proteomics technology, new concepts in ovarian stimulation and in the management of polycystic ovary syndrome, and evidence-based ART. The embryology section discusses issues ranging from three-dimensional in-vitro ovarian follicle culture, and morphometric and proteomics analysis of embryos, to oocyte and embryo cyropreservation. This forward-looking volume of review articles is key reading for reproductive medicine physicians, gynecologists, reproductive endocrinologists, urologists and andrologists.

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

A groundbreaking contribution to the literature now in its revised and expanded second edition, this textbook offers a comprehensive review of diagnostic and treatment techniques for male infertility. This state-of-the-art, evidence-based textbook incorporates new multidisciplinary and complementary medicine approaches to create a first-of-its-kind guide to treatment strategies for male infertility and beyond. While this new edition is primarily designed as a reference for students and residents in reproductive medicine and andrology, it will be equally useful as well for professionals in urology, reproductive endocrinology, embryology, and research fields who are interested in the role that antioxidants play in male infertility. World-renowned experts in these areas have been selected to participate in this work. Careful selection of the highest quality content will span the whole range of topics in the area of male infertility, providing a complete review of well-established and current diagnostic and treatment techniques for male infertility. The incorporation of 20 new chapters will enhance the book’s appeal by including the most recent advances brought to the male infertility arena. Additionally, this edition incorporates new features, including bulleted key points, review criteria and select video clips demonstrating some of the most fascinating male infertility treatment modalities. A dedicated new section on current guidelines on male infertility will enlighten readers on how to most optimally manage male infertility clinical scenarios. Covering all aspects of diagnosis and management, ART, lifestyle factors and associated conditions for male infertility, Male Infertility: Contemporary Clinical Approaches, Andrology, ART and Antioxidants will be a readily accessible, high quality reference for medical students and residents, and will be of significant value to professionals working in the various fields treating this condition as well.

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 comprehensive and practice-oriented resource guide to currently available diagnostic and treatment options for male infertility disorders. Topics covered range from basic sperm biology and male reproductive endocrinology, to immunology, specialized sperm testing, and the genetic background to male infertility. The authors emphasize the investigation, diagnostic testing, and management of the infertile male, but also examine such timely issues as gender selection, HIV discordance couples, and posthumous reproduction. Other topics of interest include laboratory accreditation, vasectomy reversal, ethical and legal considerations of donor insemination, optimizing success in a donor insemination program, and strategic therapies for ejaculatory disorders and erectile dysfunction in infertile men.

Discusses sperm collection procedures, outlines processing methods, and details various sperm enhancement technologies.

This book addresses various aspects of male reproduction ranging from mind to testis. The basis of maleness lies in the Y chromosome. Reproductive functions depend upon the development of male organs from embryo to manhood. Testis, the male gonad, produces hormones and sperms; the latter is ejaculated in semen secreted by accessory sex glands. The testicular events are under neuroendocrine regulation which coordinates reproductive life from puberty to andropause. Biology is as important as psychology in the control of reproduction. Behaviours are rooted in the brain. Various brain areas and neural circuits regulate male behaviours. Brain sexual polymorphism is the basis of homosexuality and transgenders. Neurophysiology has always been complex to understand. But, this book presents it in a simpler way. Reproductive organs receive systemic influences, too. The book describes roles of metabolic, immune and thyroid status in reproduction. The book has chapters on male reproductive pathophysiology. Principles of diagnosis and management are also included. The last section deals with contraception and yoga. The traditional wisdom of yoga has been used for millennia to enhance sexual and reproductive experience. This book will serve basic medical scientists, urologists, nephrologists, surgeons, andrologists, endocrinologists, gynaecologists, nurses, councellors and also the students of biological sciences who want to study reproduction in human male. The language is kept simple so that an inquisitive person with a background of biology too may read it.

This state-of-the-art laboratory manual includes 20 clinical protocols used daily for the investigation of the infertile male, presented with easy to understand, step-by-step methodology. The protocols are arranged from routine to advanced laboratory procedures common to clinical practice, including computer-assisted semen analysis, sperm preparation for IUI by density gradient and swim-up, sperm cryopreservation, and sperm DNA fragmentation test by TUNEL method, among others. The methodology in each protocol follows best practice guidelines made clearer by professionally hand-drawn illustrations covering most of the important steps and equipment. The authors, hailing from the world-renowned Andrology Center at Cleveland Clinic, have over 50 years of combined first-hand experience in managing very busy diagnostic and research facilities in male infertility and andrology. The book will be an indispensable resource for thousands of laboratory technologists, clinicians and reproductive professionals

(andrologists, embryologist, etc.) engaged in the diagnosis and management of infertile men around the world.
Part of a new series on reproductive medicine, this book is a complete guide to andrology and embryology. Divided into 38 chapters, the text begins with in depth discussion on male infertility covering sperm function tests, screening, sperm selection for ART, sperm banking, and various causes of male infertility. The second part of the book examines assisted reproductive techniques in male infertility, frozen embryo transfer, oocyte and embryo cryopreservation, third party reproduction, and more. 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 Assisted Reproductive Technology. Key points Comprehensive guide to andrology and embryology Part of new series on reproductive medicine Covers numerous ART procedures for male infertility Chapters include key points and detailed references for further reading
Understanding animal andrology is fundamental to optimising genetic breeding traits in domestic and wild animals. This book provides extensive coverage of male reproductive biology, discussing the essentials of sperm production, harvest and preservation before covering the applications to a range of animals including cattle, horses, pigs, small ruminants, camelids, cats and dogs, poultry and exotic species. It also examines the laboratory procedures that provide the basis of general fertility research.
This book is a complete guide to setting up an IVF laboratory. Beginning with an introduction to the history and the basics, the following chapters take clinicians through the full set up and management process, from air quality control and cryopreservation facilities, to morphological embryo assessment, sperm processing and selection techniques, to document management systems. A separate chapter provides an update on semen analysis based on World Health Organisation (WHO) standards and interpretation of results. Written by an extensive author and editor team from the UK, Europe and the USA, this practical manual is invaluable for embryologists and IVF specialists planning to set up and manage an IVF laboratory successfully. Key points Practical guide to setting up and managing an IVF laboratory Provides step by step process Includes chapter on semen analysis based on WHO standards and interpretation of results Extensive author and editor team from UK, Europe and USA
Semen analysis can be a confusing, intimidating procedure. Patient Guide to Semen Analysis is a guidebook expressly written for male fertility patients undergoing testing. Presented in an easy to read "Question & Answer" format, the text covers everything from the procedure itself, to the biological foundation of fertility and the male reproductive system. Several jokes and cartoons lighten the text, and make an otherwise technical subject easy to grasp. The author, Dr. Jeyendran, is a leading expert in the field with numerous publications. Having worked directly with patients for over twenty-five years, he feels that sharing his medical knowledge makes the entire fertility management process easier. By knowing exactly what's involved during each step of the process, the male fertility patient and their partner will feel more at ease and capable of making the best decisions.
The definitive and essential source of reference for all laboratories involved in the analysis of human semen.
By closing the gap between general programming books and those on laboratory automation, this timely book makes accessible to every laboratory technician or scientist what has traditionally been restricted to highly specialized professionals. Following the idea of "learning by doing", the book provides an introduction to scripting using AutoIt, with many workable examples based on real-world scenarios. A large portion of the book tackles the traditionally hard problem of instrument synchronization, including remote, web-based synchronization. Automated result processing, database operation, and creation of graphical user interfaces are also examined. Readers of this book can immediately profit from the new knowledge in terms of both increased efficiency and reduced costs in laboratory operation. Above all, laboratory technicians and scientists will learn that they are free to choose whatever equipment they desire when configuring an automated analytical setup, regardless of manufacturers suggested specifications.
A comprehensive and practical account of how to set up and run a successful IUI and ovulation induction program.
A structured guide, illustrated with case histories, to the interpretation of semen analysis.
This practical book in instrumental analytics conveys an overview of important methods of analysis and enables the reader to realistically learn the (principally technology-independent) working techniques the analytical chemist uses to develop methods and conduct validation. What is to be conveyed to the student is the fact that analysts in their capacity as problem-solvers perform services for certain groups of customers, i.e., the solution to the problem should in any case be processed in such a way as to be "fit for purpose". The book presents sixteen experiments in analytical chemistry laboratory courses. They consist of the classical curriculum used at universities and universities of applied sciences with chromatographic procedures, atom spectrometric methods, sensors and special methods (e.g. field flow fractionation, flow injection analysis and N-determination according to Kjeldahl). The carefully chosen combination of theoretical description of the methods of analysis and the detailed instructions given are what characterizes this book. The instructions to the experiments are so detailed that the measurements can, for the most part, be taken without the help of additional literature. The book is complemented with tips for effective literature and database research on the topics of organization and the practical workflow of experiments in analytical laboratory, on the topic of the use of laboratory logs as well as on writing technical reports and grading them (Evaluation Guidelines for Laboratory Experiments). A small introduction to Quality Management, a brief glance at the history of analytical chemistry as well as a detailed appendix on the topic of safety in analytical laboratories and a short introduction to the new system of grading and marking chemicals using the "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)", round off this book. This book is therefore an indispensable workbook for students, internship assistants and lecturers (in the area of chemistry, biotechnology, food technology and environmental technology) in the basic training program of analytics at universities and universities of applied sciences.
Among the many recent advances in assisted reproduction therapies (ART), improved technologies for identifying viable oocytes, sperm, and embryos are of primary importance. Paradoxically, the latest advances presented at conferences and symposia are often slow to become part of the daily routine in IVF laboratories. Detailing established and developing techniques, A Practical Guide to Selecting Gametes and Embryos provides a user-friendly text of ready-to-use ARTs that can be utilized effectively in the lab. In this volume, renowned embryologist and educator Markus Montag and his expert panel highlight sophisticated and proven selection strategies and emphasize the importance of proper lab practice in

handling gametes and embryos. Topics include: Steps undertaken for the analysis of a semen sample Quality control and prevention of exposure to toxins in oocyte collection and embryo culture Morphological selection of gametes and embryos Both commonly used and innovative techniques for gamete and embryo selection, such as oxygen respiration and time-lapse imaging Invasive techniques, including polar body, embryo, and blastocyst biopsies as well as aneuploidy testing by FISH and array-CGH Accompanied by numerous figures and descriptions, this guide to selecting gametes and embryos brings the insight of international authors with knowledge and expertise, highlighting practical tips and key points. The book offers a starting point for applying successful selection strategies for reducing the rate of high-risk multiple gestations while maintaining or increasing viable pregnancy rates.

This practical, extensively illustrated handbook covers the procedures that are undertaken in andrology and ART laboratories to analyse and assess male-factor infertility, and to prepare spermatozoa for use in assisted conception therapy. The content is presented as brief, authoritative overviews of the relevant biological background for each area, plus detailed, step-by-step descriptions of the relevant analytical procedures. Each technical section includes pertinent quality control considerations, as well as the optimum presentation of results. In addition to the comprehensive 'basic' semen analysis, incorporating careful analysis of sperm morphology, the handbook provides established techniques for the use of computer-aided sperm analysis and sperm functional assessment. Throughout the handbook the interpretation of laboratory results in the clinical context is highlighted, and safe laboratory practice is emphasized. It is an invaluable resource to all scientists and technicians who perform diagnostic testing for male-factor infertility.