Preface

Appropriate assessment of oocytes and spermatozoa is a basic cornerstone of modern day IVF practice. It provides key information in selecting the treatment options for providing the best care for infertile patients to maximize the chance of successful outcomes. In addition to the well-established routine procedures, there are several recently developed evaluation methods which show great promise to advance accuracy of assessment and improve diagnostic value. Subsequently, choices and applications of micromanipulation techniques (including intracytoplasmic sperm injection or biopsy of polar body, cleavage or blastocyst stage embryo), using the most adequate instrumentations and procedures, are critical elements in the contemporary IVF laboratory. It requires not only abundant procedural experience but also a full and deep understanding of gamete and embryo physiology with adequate molecular insights.

Our textbook provides an excellent and detailed overview of well-recognized procedures of gamete assessment and micromanipulation, as well as a comprehensive presentation of novel techniques, approaches, and instrumentation. The textbook is unique in having a section dedicated to providing a comprehensive description of various micromanipulators available for the ICSI procedures. The unlimited theoretical and practical details provided by this book make it an indispensable resource to all professionals working in the field of assisted reproduction. The chapters are written by world-renowned experts on their field, with decades of practical experience and vast amounts of publication in the scientific literature.

We are thankful to Richard Lansing, executive editor, for his support and advice, and Kristopher Spring, Associate Editor and Margaret Burns, publishing manager, for their tireless efforts in reviewing and editing each of the manuscripts. Furthermore, we are grateful to all of the outstanding contributors for sharing their knowledge and submitting their manuscripts on time. Finally, we are indebted to our families for their love and support.

Atlanta, GA, USA        Zsolt Peter Nagy, MD, PhD
Montreal, QC, Canada    Alex C. Varghese, PhD
Cleveland, OH, USA      Ashok Agarwal, PhD
Gamete Assessment, Selection and Micromanipulation in ART
A Practical Guide
Nagy, Z.P.; Varghese, A.C.; Agarwal, A. (Eds.)
2013, XV, 402 p. 60 illus., 40 illus. in color., Softcover