This comprehensive, multidisciplinary guide provides an up-to-date presentation of fertility preservation techniques with male cancer patients and other challenging conditions. Divided into four thematic sections, part one provides an overview of the pathophysiologic processes interrelating cancer and its treatment with infertility and discusses different methods of sperm preservation and fertility outcomes in cancer patients. Part two then explores male fertility preservation in various non-cancerous conditions, such as immunosuppressed, hypogonadal and transgender patients. The fundamental principles of cryobiology and sperm optimization are covered in part three, which also offers essential building blocks for scientists to develop a sperm banking service and implement high standards of practice. The final section describes the current practices of male fertility preservation along with its psychological impact on patients, and extends beyond to future innovative methods—tissue preservation, xenografting and artificial gametes—being researched and implemented in this field. Fertility preservation among cancer patients and survivors is an evolving practice, which involves focused research and timely collaboration of professionals from related fields. The Complete Guide to Male Fertility Preservation is unique and original in its design and will appeal to a larger audience of andrologists, reproductive endocrinologists, urologists, embryologists, and all other clinicians practicing reproductive medicine and oncology.