

1. Record Nr.	UNINA9910300315903321
Autore	Dey Pranab
Titolo	Basic and Advanced Laboratory Techniques in Histopathology and Cytology // by Pranab Dey
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
ISBN	981-10-8252-9
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XXV, 275 p. 174 illus. in color.)
Disciplina	616.07583
Soggetti	Pathology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Fixation of histology samples -- Processing of tissue -- Embedding of tissue -- Decalcification of bone -- Tissue microtomy -- Frozen section of tissue: technique and applications -- Staining principle and general procedure of stain -- Haematoxylin and eosin stain -- Special stains for protein, lipid, carbohydrate, nucleic acid and pigments -- Stains for the connective tissue -- Stains for the amyloid -- Stains for the microbial organisms -- Cytology sample: procurement, fixation and processing -- Routine staining in cytology laboratory -- Fine needle aspiration biopsy technique -- Immunochemistry in histology and cytology: principle, technique and applications -- Flow cytometry: principle, technique and applications -- Digital image analysis and virtual microscopy: principle, technique and applications -- Liquid based cytology and automated screening devices -- Polymerase chain reaction and DNA sequencing: principle, technique and applications -- Fluorescent in situ hybridisation techniques: principle, technique and applications -- Tissue microarray: technique and applications -- Sanger sequencing and next generation gene sequencing: basic principles and applications -- Light microscope: optical components, principle and handling -- Fluorescence microscope and confocal microscopy: basic parts and principle -- Laboratory organization and quality control -- Laboratory safety: essential precautions.
Sommario/riassunto	This book provides detailed information on basic and advanced laboratory techniques in histopathology and cytology. It discusses the principles of and offers clear guidance on all routine and special

laboratory techniques. In addition, it covers various advanced laboratory techniques, such as immunocytochemistry, flow cytometry, liquid based cytology, polymerase chain reaction, tissue microarray, and molecular technology. Further, the book includes numerous color illustrations, tables and boxes to familiarize the reader with the work of a pathology laboratory. The book is mainly intended for postgraduate students and fellows in pathology as well as practicing pathologists. The book is also relevant for all the laboratory technicians and students of laboratory technology.
