Molecular Pathology Book List
Association for Molecular Pathology Training & Education Committee
Updated September 2017; posted online at: https://www.amp.org/education/education-resources/

Basics/General Genetics: Books


2. **The Molecular Basis of Human Disease, 2nd ed**

3. **Genomic and Personalized Medicine, 2nd ed**

4. **Medical Genetics (5th Ed)**
   >> With Student Consult Online Access

5. **DNA from A to Z & Back Again**
   >> Latest edition of the previously titled DNA Simplified: The Hitchhiker's Guide to DNA

6. **Molecular Genetic Pathology, 2nd ed**
   >> Outline format, useful for board review and as a quick reference guide

7. **Genomics and Clinical Medicine**

8. **Fundamentals of Molecular Diagnostics**
   >> Good, easy to read overview

9. **Molecular Diagnostics: Fundamentals, Methods, & Clinical Applications, 2nd ed**
   >> Very readable overview of the field.

10. **Thompson & Thompson Genetics in Medicine, 8th ed**
    >> With Student Consult Online Access

11. **Medical Genetics at a Glance, 3rd ed**

12. **Molecular Pathology in Clinical Practice, 2nd ed**
    >> Comprehensive resource

13. **Molecular Diagnostics, 3rd ed**

14. **Molecular Diagnostics for the Clinical Laboratorian, 2nd ed.**
    >> Excellent book
15. Smith’s Recognizable Patterns of Human Malformation, 7th ed.
Kenneth Lyons Jones

16. Principles of Molecular Pathology
Anthony A. Killeen
>>Readable overview of the field

17. Human Molecular Genetics, 4th ed.
Tom Strachan and Andrew P. Read

Charles J. Epstein, Robert Erickson, Anthony Wynshaw-Boris

19. Diagnostic Molecular Pathology in Practice: A Case-Based Approach
Iris Schrijver
>>Recommend using as supplement to any of the larger textbooks or series

20. Genomic Applications in Pathology
George Jaboue Netto, Iris Schrijver
Springer 2015 ISBN 968-1-4939-0727-4

21. Essential Concepts in Molecular Pathology
William B. Coleman and Gregory J. Tsongalis

22. Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics, 7th ed
Carl A. Burtis, David E. Bruns

23. Clinical Genomics
Shashikant Kulkarni, John Pfeifer
>>Next generation sequencing techniques for the clinical laboratory

Basics/General: Chapters
1. Henry’s Clinical Diagnosis and Management by Laboratory Methods (Clinical Diagnosis and Management by Laboratory Methods), 23rd ed
Richard A. McPherson and Matthew R. Pincus
Saunders 2016 ISBN: 1437709745
>>Parts 8 and 9 Molecular pathology: chapters 65-78

2. Essentials of Anatomic Pathology, 4th ed
Liang Cheng and David G. Bostwick, (Eds.)
>>Outline of molecular pathology (ch. 1) and medical genetics (ch. 2)

Reviews/Study Guides
1. Quick Compendium of Molecular Pathology (ASCP Quick Compendium), 3rd ed.
Daniel D. Mais, Mary Lowery Nordberg

2. Quick Compendium Companion for Molecular Pathology
George Leonard, Frank Zuehl, Daniel D. Mais,

Eberhard Passarge
Thieme Medical 2012 ISBN: 3131003642
>>Essential review of genetics

4. Referenced Review Questions in Pharmacogenomics
Robert M. White, Sr and Bonny L. Bukaveckas

5. An A-Z Guide to Pharmacogenomics
Michael G. Catania

6. Referenced Review Questions in Molecular Medicine
Robert M. White, Sr., David W. Brown, and Steven A. Williams
>>750 multiple-choice questions covering a wide range of molecular medicine related topics with short explanation of answer and references for further reading
7. *Practical Surgical Pathology: Integrating Molecular Pathology into Your Morphologic Practice*
Kirk Heriot
ASCP 2012 ISBN: 0891895884

**Methodology**

1. *From Genes to Genomes: Concepts and Applications of DNA Technology, 3rd ed*
   Jeremy W. Dale, Malcolm von Schantz and Nicholas Plant

2. *Laboratory Guide to Methods in Biochemical Genetics*
   Nenad Blau, Marius Duran, K. Michael Gibson (Eds.)

3. *Calculations for Molecular Biology and Biotechnology: A guide to mathematics in the laboratory, 2nd ed*
   Frank H. Stephenson

**Subspecialty Genetics References**

**Genetic Counseling**

1. *Introduction to Risk Calculation in Genetic Counseling, 3rd ed.*
   Ian D. Young, Oxford University Press 2006 ISBN: 0195305272
   >>Very readable guide for learning genetic risk assessment calculations


**Forensics**

1. *Forensic DNA Typing: Biology, Technology and Genetics of STR Markers, 2nd ed.*
   John M. Butler

2. *Forensic DNA Typing Protocols (Methods in Molecular Biology), 2nd ed*
   William Goodwin

**Microbiology**

1. *Molecular Microbiology: Diagnostic Principles and Practice, 3rd ed*
   David H. Persing, Fred C. Tenover, Randall T. Hayden, Greet Ieven, Melissa B. Miller and Frederick S. Nolte (Eds.)

2. *Manual of Clinical Microbiology, 10th ed*
   James Versalovic
   >>Molecular pathology chapter

3. *Molecular Pathology in Clinical Practice: Infectious Diseases*
   Debra G.B. Leonard

   Steven C. Specter, Richard L. Hodinka, Danny L. Wiedbrauk, Stephen A. Young

5. *Clinical Virology, 4th ed*
   Douglas Richman and Richard Whitley

6. *Diagnostic Pathology: Infectious Diseases 1st ed*
   Danny Milner

**Transfusion Medicine**

1. *AABB Technical Manual, 18th ed*
   Edited by: Mark K. Fung, MD, PhD; Brenda J. Grossman, MD, MPH; Christopher Hillyer, MD; Connie M. Westhoff, PhD, MT(ASCP)SBB
   AABB, 2014
   >>>Detailed Transfusion Medicine reference manual with information on genetics of blood group antigens, molecular methods and SOP

2. *BeadChip Molecular Immunohematology: Toward Routine Donor and Patient Antigen Profiling by DNA Analysis*
   JoAnn M. Moulds, Paul M. Ness, Steve R. Sloan (Eds.)
Pharmacogenomics

1. *Pharmacogenomics (Drugs and the Pharmaceutical Sciences), 2nd ed*
   Werner Kalow, Urs B. Meyer, Rachel F. Tyndale (Eds.)

2. *Principles of Pharmacogenetics and Pharmacogenomics*
   Russ B. Altman (Editor), David Flockhart (Editor), David B. Goldstein (Eds.)

Biochemical Genetics

1. *Pediatric Endocrinology and Inborn Errors of Metabolism, 2nd ed*
   Kyriakie Sarafoglou, Georg F. Hoffman, and Karl S. Roth
   >>very readable, good both as a textbook and table provide excellent summaries for quick review

2. *Physician’s Guide to Treatment and Follow-up of Metabolic Diseases*
   Nenad Blau, Marinus Duran, K. Michael Gibson, Carlo Dionisi-Vici (Eds)

3. *Inborn Metabolic Diseases: Diagnosis and Treatment, 5th ed.*
   Jean-Marie Saudubray, Matthias R. Baumgartner and John H. Walter (Eds.)
   >> Excellent text and reference

   William L. Nyhan, Bruce A. Barshop, and Aida I Al-Aqeel
   >> Excellent text and reference

   Joe T.R. Clarke

6. *Fundamentals of Biochemistry: Life at the Molecular Level, 5th ed*
   Donald Voet, Judith G. Voet and Charlotte W. Pratt

General Oncology

1. *The Molecular Basis of Human Cancer, 2nd ed*
   William B. Coleman and Gregory J. Tsongalis

2. *Cell and Tissue Based Molecular Pathology A volume in the Foundations in Diagnostic Pathology Series*
   Raymond R. Tubbs and Mark H. Stoler, (Eds.)
   >>Presents molecular methods and their applications in areas of surgical pathology and cytopathology

3. *Molecular Genetic Testing in Surgical Pathology*
   John P. Pfeifer
   Lippincott Williams & Wilkins 2005 ISBN: 0781747481

4. *Molecular Pathology in Clinical Practice: Oncology*
   Debra G.B. Leonard

   Lauren Pecorino

6. *Molecular Basis of Human Cancer*
   C. Nicolini (Eds)
   Springer 2013 ISBN: 1489925651

7. *Molecular Testing in Cancer*
   George M. Yousef and Serge Jothy (Eds)
   Springer 2015 ISBN: 978-3-319-16304-8

8. *Molecular Oncology: Causes of Cancer and Targets for Treatment*
   Edward P. Gelmann, Charles L. Sawyers, Frank J. Rauscher III (Eds)

9. *Molecular Oncology Testing for Solid Tumors*
   Michael Ola Idowu, Catherine Isabelle Dumur, Carleton Theodore Garrett
   Springer 2015 ISBN: 978-3-319-16304-8

10. *Diagnostic Pathology: Molecular Oncology 1st ed*
Hematopathology
   Drew Provan and John Gribben, (Eds.)

2. Molecular Aspects of Hematologic Malignancies: Diagnostic Tools and Clinical Applications (Principles and Practice)
   Michael Witt, Malgorzata Dawidowska and Tomasz Szczepanski

3. Flow cytometry, Immunohistochemistry, and Molecular Genetics for Hematologic Neoplasms
   Tsieh Sun

4. Hematopathology, 2nd ed
   Elaine Sarkin Jaffe, Daniel A. Arber, Elias Campo, Nancy Lee Harris and Leticia Quintanilla-Fend

Surgical Pathology
1. IARC WHO Classification of Tumours Series
   Published by the World Health Organization Press
   >> The books are arranged by tumor entity and contain molecular and cytogenetic data as applicable to each entity


2. Diagnostic Pathology and Molecular Genetics of the Thyroid: A Comprehensive Guide for Practicing Thyroid Pathology, 2nd ed.
   Yuri E Nikiforov, Paul W Biddinger, Lester D Thompson
   Lippincott Williams & Wilkins 2012 ISBN: 1451114559

Medical Subspecialties and Genetics
1. Molecular and Genetic Basis of Renal Disease A companion to Brenner and Rector’s The Kidney
   David B. Mount and Martin R. Pollak

2. The Molecular and Genetic Basis of Neurologic and Psychiatric Disease, 5th ed.
   Roger N. Rosenberg and Juan M. Pascual (Eds.)

3. Genetics and Molecular Aspects of Gastrointestinal Disease, An issue of Clinics in Laboratory Medicine
   David C. Whitcomb and Antonia Sepulveda

4. Molecular Pathology in Clinical Practice: Genetics
   Debra G.B. Leonard

5. Molecular Pathology of Nervous System Tumors: Biological and Targeted Therapies
   Matthias A. Karajannis and David Zagzag (Eds)
Reference Books

1. *Principles and Practice of Medical Genetics, 5th ed*
   David L. Rimoin, J. Micheal Connor, Reed E Pyeritz, and Bruce R Korf

2. *The Online Metabolic and Molecular Bases of Inherited Disease*
   David Valle, MD, Editor-in-Chief, Arthur L. Beaudet, MD, Editor, Bert Vogelstein, MD, Editor, Kenneth W. Kinzler, Ph.D., Editor, Stylianos E. Antonarakis, MD, D.Sc., Editor, Andrea Ballabio, MD, Editor, K. Michael Gibson, Ph.D., FACMG, Editor, Grant Mitchell, MD, Editor

3. *Lewin’s Genes XII, 11th ed*
   Jocelyn E. Krebs, Elliot S Goldstein and Stephen T. Kilpatrick

   Bruce Alberts, Alexander Johnson, Julian Lewis, David Morgan, Martin Raff, Keith Roberts and Peter Walter

Find the online version of MPOC 2017 on

Available on: EDUCATE.AMP.ORG
Molecular pathology is an emerging discipline within pathology which is focused in the study and diagnosis of disease through the examination of molecules within organs, tissues or bodily fluids. Molecular pathology shares some aspects of practice with both anatomic pathology and clinical pathology, molecular biology, biochemistry, proteomics and genetics, and is sometimes considered a "crossover" discipline. It is multi-disciplinary in nature and focuses mainly on the sub-microscopic aspects of Basics/General Genetics: