

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

1. *Basic Concepts of Molecular Pathology Series: Molecular Pathology Library*,
Vol. 2. Cagle, Philip T. Allen, Timothy C. (Eds.)
Springer 2009, Softcover ISBN: 0387896250

2. *The Molecular Basis of Human Disease, 2nd ed*
William B. Coleman, Gregory J. Tsongalis (Eds.)
Humana Press 2016 ISBN: 1934115183

3. *Genomic and Personalized Medicine, 2nd ed*
Huntington F. Willard, Geoffrey S. Ginsburg
Elsevier 2012 ISBN: 0123822270

4. *Medical Genetics (5th Ed)*
Lynn B. Jorde, John C. Carey, and Michael J. Bamshad,
Elsevier 2015 ISBN: 0323188357
>> With Student Consult Online Access

5. *DNA from A to Z & Back Again*
Carol A. Holland and Daniel H. Farkas
AACC Press 2008 ISBN: 159425088X
>> Latest edition of the previously titled *DNA Simplified: The Hitchhiker's Guide to DNA*

6. *Molecular Genetic Pathology, 2nd ed*
Liang Cheng and David Zhang
Springer 2013 ISBN: 1461447992
>> Outline format, useful for board review and as a quick reference guide

7. *Genomics and Clinical Medicine*
Dhavendra Kumar and David Weatherall
Oxford University Press 2008 ISBN: 0195188136

8. *Fundamentals of Molecular Diagnostics*
David E Bruns, Edward R Ashwood, and Carl A Burtis
Saunders 2007 ISBN: 1416037373
>> Good, easy to read overview

9. *Molecular Diagnostics: Fundamentals, Methods, & Clinical Applications, 2nd ed*
Lela Buckingham and Maribeth Flaws
F. A. Davis Company 2011 ISBN: 0803626770
>> Very readable overview of the field.

10. *Thompson & Thompson Genetics in Medicine, 8th ed*
Robert L. Nussbaum, Roderick R. McInnes, and Huntington F. Willard
Elsevier 2015 ISBN: 1437706963
>> With Student Consult Online Access

11. *Medical Genetics at a Glance, 3rd ed*
Dorian J. Pritchard and Bruce R. Korf
Wiley-Blackwell 2013 ISBN: 0470656549

12. *Molecular Pathology in Clinical Practice, 2nd ed*
Debra G.B. Leonard
Springer 2016 ISBN: 3319196732
New Edition Springer 2009 Softcover ISBN: 978038787373
>> Comprehensive resource

13. *Molecular Diagnostics, 3rd ed*
George P. Patrinos, Wilhelm Ansorge and Phillip B. Danielson (Eds.)
Academic Press 2016 ISBN: 0128029718

14. *Molecular Diagnostics for the Clinical Laboratorian, 2nd ed.*
William B. Coleman and Gregory J. Tsongalis, (Eds.)
Humana Press 2005 ISBN: 588293564
>> Excellent book

15. *Smith's Recognizable Patterns of Human Malformation, 7th ed.*

Kenneth Lyons Jones

Saunders 2013 ISBN: 1455738115

16. *Principles of Molecular Pathology*

Anthony A. Killeen

Humana Press 2010 ISBN: 1617373486

>>Readable overview of the field

17. *Human Molecular Genetics, 4th ed.*

Tom Strachan and Andrew P. Read

Garland Science 2010 ISBN: 0815341490

18. *Inborn Errors of Development: The Molecular Basis of Clinical Disorders of Morphogenesis, 2nd Ed.*

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

Oxford University Press 2008 ISBN: 019514502X

19. *Diagnostic Molecular Pathology in Practice: A Case-Based Approach*

Iris Schrijver

Springer 2012 ISBN: 3642196764

>> Recommend using as supplement to any of the larger textbooks or series

20. *Genomic Applications in Pathology*

George Jabboure Netto, Iris Schrijver

Springer 2015 ISBN 968-1-4939-0727-4

21. *Essential Concepts in Molecular Pathology*

William B. Coleman and Gregory J. Tsongalis

Academis Press 2010 ISBN: 0123744180

22. *Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics, 7th ed*

Carl A. Burtis, David E. Bruns

Saunders 2014 ISBN: 978-1455741656

23. *Clinical Genomics*

Shashikant Kulkarni, John Pfeifer

Academic Press, 2014 ISBN: 0124047483

>>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.)

Springer 2016 ISBN: 3319233796

>>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

ASCP Press Companion 2008 ISBN: 0891899995

2. *Quick Compendium Companion for Molecular Pathology*

George Leonard, Frank Zuehl, Daniel D. Mais,

ASCP Press 2009 ISBN: 0891895906

3. *Color Atlas of Genetics, 4th ed.*

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

AACC Press 2007 ISBN: 1594250707

5. *An A-Z Guide to Pharmacogenomics*

Michael G. Catania

AACC Press 2006 ISBN: 1594250472

6. *Referenced Review Questions in Molecular Medicine*

Robert M. White, Sr., David W. Brown, and Steven A. Williams

AACC Press 2005 ISBN: 1594250332

>>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

Wiley 2011 ISBN: 0470683856

2. *Laboratory Guide to Methods in Biochemical Genetics*

Nenad Blau, Marius Duran, K. Michael Gibson (Eds.)

Springer 2008 ISBN: 9783540766971

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

Frank H. Stephenson

Elsevier 2010 ISBN: 9780123756909

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

2. *Practical Genetic Counseling, 7th ed.*

Peter S. Harper, CRC Press 2010 ISBN: 0340990694

Forensics

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

John M. Butler

Academic Press 2005 ISBN: 0121479528

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

William Goodwin

Humana Press 2016 ISBN: 1493935956

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.)

ASM Press 2016 ISBN: 1555819088

2. *Manual of Clinical Microbiology, 10th ed*

James Versalovic

ASM Press 2011 ISBN: 1555814638

>>>Molecular pathology chapter

3. *Molecular Pathology in Clinical Practice: Infectious Diseases*

Debra G.B. Leonard

Springer, 2008 ISBN: 0387873678

4. *Clinical Virology Manual, 4th ed*

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

ASM Press 2009 ISBN: 155581462X

5. *Clinical Virology, 4th ed*

Douglas Richman and Richard Whitley

ASM Press 2016 ISBN: 1555819422

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

Danny Milner

Elsevier 2015 ISBN: 9780323395373

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.)

Spring, 2011 ISBN: 978-1-4419-7512-6

Pharmacogenomics

1. *Pharmacogenomics (Drugs and the Pharmaceutical Sciences), 2nd ed*

Werner Kalow, Urs B. Meyer, Rachel F. Tyndale (Eds.)

CRC Press 2005 ISBN: 1574448781

2. *Principles of Pharmacogenetics and Pharmacogenomics*

Russ B. Altman (Editor), David Flockhart (Editor), David B. Goldstein (Eds.)

Cambridge Univ Press 2012; ISBN-13: 978-0521885379

Biochemical Genetics

1. *Pediatric Endocrinology and Inborn Errors of Metabolism, 2nd ed*

Kyriakie Sarafoglou, Georg F. Hoffman, and Karl S. Roth

McGraw Hill 2017 ISBN: 0071773140

>>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)

Springer 2014 ISBN: 3642403360

3. *Inborn Metabolic Diseases: Diagnosis and Treatment, 5th ed.*

Jean-Marie Saudubray, Matthias R. Baumgartner and John H. Walter (Eds.)

Springer 2016 ISBN: 3662497692

>> Excellent text and reference

4. *Atlas of Metabolic Diseases, 3rd ed.*

William L. Nyhan, Bruce A. Barshop, and Aida I Al-Aqeel

CRC Press 2011 ISBN: 1444112252

>> Excellent text and reference

5. *A Clinical Guide to Inherited Metabolic Diseases, 3rd ed.*

Joe T.R. Clarke

Cambridge University Press 2006 ISBN: 0521614996

6. *Fundamentals of Biochemistry: Life at the Molecular Level, 5th ed*

Donald Voet, Judith G. Voet and Charlotte W. Pratt

Wiley 2016 ISBN: 1118918401

General Oncology

1. *The Molecular Basis of Human Cancer, 2nd ed*

William B. Coleman and Gregory J. Tsongalis

Human Press 2017 ISBN: 19341151853

2. *Cell and Tissue Based Molecular Pathology A volume in the Foundations in Diagnostic Pathology Series*

Raymond R. Tubbs and Mark H. Stoler, (Eds.)

Churchill Livingstone 2008 ISBN: 0443069018

>>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

Springer 2009 ISBN: 0387873643

5. *Molecular Biology of Cancer: Mechanisms, Targets, and Therapeutics, 4th ed*

Lauren Pecorino

OUP Oxford 2016 ISBN: 0198717348

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 2014 ISBN: 1489980490

8. *Molecular Oncology: Causes of Cancer and Targets for Treatment*

Edward P. Gelmann, Charles L. Sawyers, Frank J. Rauscher III (Eds)

Cambridge University Press 2014 ISBN: 0521876629

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*

Mohammad Vasef, Aaron Auerbach Elsevier 2015. ISBN: 9780323395359

Hematopathology

1. *Molecular Haematology, 3rd ed.*

Drew Provan and John Gribben, (Eds.)
Wiley-Blackwell 2010 ISBN: 1405182318

2. *Molecular Aspects of Hematologic Malignancies: Diagnostic Tools and Clinical Applications (Principles and Practice)*

Michael Witt, Malgorzata Dawidowska and Tomasz Szczepanski
Springer 2012 ISBN: 3642294669

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

Tsieh Sun
Lippincott Raven 2011 ISBN: 1608316165

4. *Hematopathology, 2nd ed*

Elaine Sarkin Jaffe, Daniel A. Arber, Elias Campo, Nancy Lee Harris and Leticia Quintanilla-Fend
Elsevier 2016. ISBN: 0323296137

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

- a. *Haematopoietic and Lymphoid Tissues* S.H. Swerdlow, E. Campo, N.L. Harris, E.S., Jaffe, S.A. Pileri, H. Stein, J. Thiele, J.W. Vardiman (Eds.) 2008 ISBN: 9283224310
- b. *Central Nervous System* D.N. Louis, H. Ohgaki, O.D. Wiestler, W. K. Cavenee. (Eds.) 2007 ISBN: 9283224302
- c. *Skin Tumours* P.E. LeBoit, G. Burg, D. Weedon, A Sarasin (Eds.) 2005 ISBN: 9283224140
- d. *Soft Tissue and Bone* C.D.M. Fletcher, J.A. Bridge, P. Hogendoorn, F. Mertens (Eds.) 2013 ISBN: 9283224345e. *Head and Neck* L. Barnes, J.W. Eveson, P. Reichart, D. Sidransky (Eds.) 2005 ISBN: 9283224175
- f. *Urinary System and Male Genital Organs* J.N. Eble, G. Sauter, J.I. Epstein, I.A., Sesterhenn (Eds.) 2004 ISBN: 9283224159
- g. *Endocrine Organs* R.A. DeLellis, R.V. Lloyd, P.U. Heitz, C. Eng (Eds.) 2004 ISBN: 9283224167
- h. *Lung, Pleura, Thymus and Heart* W.D. Travis, E. Brambilla, H.K. Muller-Hermelink, C.C. Harris (Eds.) 2004 ISBN: 9283224183

- i. *Breast* S.R. Lakhani, I.O. Ellis, S.J. Schnitt (Eds.) 2012 ISBN: 9283224337
- j. *Female Reproductive Organs* R.J. Kurman, M.L. Carcangiu, C.S. Herrington (Eds.) 2014 ISBN: 9283224353
- j. *Digestive System F.* T. Bosman & F. Carneiro (Eds.) 2010 ISBN: 9283224329

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
Saunders 2007 ISBN: 1416002529

2. *The Molecular and Genetic Basis of Neurologic and Psychiatric Disease, 5th ed.*

Roger N. Rosenberg and Juan M. Pascual (Eds.)
Academic Press 2014 ISBN: 0124105297

3. *Genetics and Molecular Aspects of Gastrointestinal Disease, An issue of Clinics in Laboratory Medicine*

David C. Whitcomb and Antonia Sepulveda
Saunders 2005 ISBN: 1416027025

4. *Molecular Pathology in Clinical Practice: Genetics*

Debra G.B. Leonard
Springer 2008 ISBN: 0387873732

5. *Molecular Pathology of Nervous System Tumors: Biological and Targeted Therapies*

Matthias A. Karajannis and David Zagzag (Eds.)
Springer 2014 ISBN: 149391829X

Reference Books

1. *Principles and Practice of Medical Genetics, 5th ed*

David L. Rimoin, J. Micheal Connor, Reed E Pyeritz, and Bruce R Korf
Churchill Livingstone 2006 ISBN: 0443068704

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
McGraw-Hill, [available online http://ommbid.mhmedical.com/book.aspx?bookid=971](http://ommbid.mhmedical.com/book.aspx?bookid=971)

3. *Lewin's Genes XII, 11th ed*

Jocelyn E. Krebs, Elliot S Goldstein and Stephen T. Kilpatrick
Jones & Bartlett Learning, 2013 ISBN: 1449659851

4. *Molecular Biology of the Cell (6th Edition)*

Bruce Alberts, Alexander Johnson, Julian Lewis, David Morgan, Martin Raff, Keith Roberts and Peter Walter
Garland Science 2014 ISBN: 08153443

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Molecular pathology is the study of disease at the molecular level. It is becoming increasingly important in pathology. Its utility currently includes: Proving clonality, esp. in hematologic malignancies, to help establish a malignant diagnosis. Finding recurrent genetic changes - which may be diagnostic, prognostic and suggest a specific therapy. Monitor minimal residual disease. Molecular pathology can be divided as follows: A simplified overview of molecular pathology The main portion of the book presents forensic pathology essentials in the form of learning objectives—each delineated with a code: “M” for items students must know, and “S” for those they must do. This section begins by discussing the government’s role, describes medical examiner and coroner systems, and analyzes the academic discipline of forensic pathology. Each chapter contains a list of pertinent vocabulary and references for further study. By mastering the objectives contained in each chapter of this manual, forensic pathology students will be ready to pass certification exams and work confidently in the field. Get IT free here. This book focuses on putting successful molecular strategies into practice for the treatment of gynecologic cancer.