

Molecular Pathology Book List

Association for Molecular Pathology Training & Education Committee

Updated August 2021; 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 (6th Ed)*
Lynn B. Jorde, John C. Carey, and Michael J. Bamshad,
Elsevier 2020 ISBN: 0323597371
>> With Student Consult Online Access

5. *DNA from A to Z Updated* Daniel H. Farkas
AACCC Press ISBN: 1594250022
>> Latest edition of the previously titled *DNA from A to Z and back again*

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. *Clinical Molecular Medicine: Principles and Practice*
Dhavendra Kumar
Academic Press 2020 ISBN: 0128093566

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, 3rd ed*
Lela Buckingham
F. A. Davis Company 2019 ISBN: 0803668295
>> 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: 1588293564
>> Excellent book

15. *Smith's Recognizable Patterns of Human Malformation, 8th ed.*
Kenneth Lyons Jones, Marilyn Crandall Jones, Miguel del Campo
Elsevier 2021 ISBN: 0323638821

16. *Principles of Molecular Pathology*
Anthony A. Killeen
Humana Press 2010 ISBN: 1617373486
>> **Readable overview of the field**

17. *Human Molecular Genetics, 5th ed.*
Tom Strachan and Andrew P. Read Garland
Science 2018 ISBN: 0815345895

18. *Epstein's Inborn Errors of Development: The Molecular Basis of Clinical Disorders of Morphogenesis, 3rd ed*
Robert Erickson, Anthony Wynshaw-Boris Oxford University Press
2016 ISBN: 0199934525

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, 2nd ed*
George Jabboure Netto, Karen L. Kaul
Springer 2019 ISBN 3319968297

21. *Essential Concepts in Molecular Pathology, 2nd ed*
William B. Coleman and Gregory J. Tsongalis
Academis Press 2019 ISBN: 0128132574

22. *Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics, 8th ed*
Carl A. Burtis, David E. Bruns Saunders
2018 ISBN: 0323530443

23. *Clinical Genomics*
Shashikant Kulkarni, Somak Roy
Academic Press, 2014 ISBN: 0124047483
>> **Next generation sequencing techniques for the clinical laboratory**

24. *Oxford Desk Reference: Clinical Genetics and Genomics (Oxford Desk Reference Series), 2nd ed*
Helen V. Firth and Jane A. Hurst
Oxford University Press, 2017. ISBN: 0199557500
>> **Recommended as a general reference guide for genetic diseases**

25. *Tietz Textbook of Clinical Chemistry and Molecular Diagnostics, 6th ed*
Nader Rifai
Saunders 2017 ISBN: 9780323359214

26. *Principles and Applications of Molecular Diagnostics, 1st ed*
Nader Rifai, Andrea Horvath, Carl Wittwer.
Elsevier 2018, ISBN: 0128160616

27. *Diagnostic Molecular Pathology: A Guide to Applied Molecular Testing, 1st ed*
William B. Coleman and Gregory J. Tsongalis
Academic Press 2016, ISBN: 0128008865

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), 4th ed.*
Daniel D. Mais, Mary Lowery Nordberg
ASCP Press Companion 2018 ISBN: 0891896678

2. *Quick Compendium Companion for Molecular Pathology*
3rd edition George Leonard, Frank Zuehl, Daniel
D. Mais,
ASCP Press ISBN: 0891899995



3. *Color Atlas of Genetics, 5th ed.*

Eberhard Passarge

Thieme Medical 2017 ISBN: 978-3132414402

>>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 w/ 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: 0470683864

2. *Laboratory Guide to Methods in Biochemical Genetics*

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

Springer 2008 ISBN: 3540766979

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

Frank H. Stephenson

Academic press 2016 ISBN: 0128022116

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

Hodder Education Publishers, 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: 1555819087

2. *Manual of Clinical Microbiology, 12th ed*

Karen E. Carroll, Michael A. Pfaller, Marie Louise Landry, Alexander J. McAdam,

Robin Patel, Sandra S. Richter, and David E. Warnock

ASM Press 2011 ISBN: 1555819834

>>Molecular pathology chapter

3. *Molecular Pathology in Clinical Practice, 2nd ed.*

Debra G.B. Leonard

Springer, 2016 ISBN: 0387873678

4. *Clinical Virology Manual, 5th ed*

Michael Loeffelholz, Richard L. Hodinka, Stephen A. Young, Benjamin A.

Pinsky

ASM Press 2016 ISBN: 1555819141

5. *Clinical Virology, 4th ed*

Douglas Richman, Richard Whitley, and Frederick G. Hayden

ASM Press 2016 ISBN: 1555819427

6. *Diagnostic Pathology: Infectious Diseases 2nd ed.*

Danny Milner

Elsevier 2019 ISBN: 0323611389

Transfusion Medicine

1. *AABB Technical Manual, 20th ed*

Edited by: Mark K. Fung, MD, PhD; Anne F. Eder, MD, PhD; Steven L. Spitalnik, MD; Connie M. Westhoff, PhD, MT(ASCP)SBB
AABB. ISBN: 978-1-56395-370-5

>>>>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: 0071773142

>>>very readable, good both as a textbook and table provide excellent summaries for quick review

2. *Physician's Guide to the Diagnosis, Treatment, and Follow-Up of Inherited Metabolic Diseases, 2nd ed.*

Nenad Blau, Carlo Dionisi Vici, Carlos R. Ferreira, Christine Vianey-Saban, Clara D. M. van Karnebeek Springer 2021 ISBN: 3030677265

3. *Inborn Metabolic Diseases: Diagnosis and Treatment, 7th ed.*

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

Springer 2022 ISBN: 3662631229

>> Excellent text and reference

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

William L. Nyhan

Hodder Educational Productions 2012 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 2016 ISBN: 1934115185

2. *Cell and Tissue Based Molecular Pathology A Volume in the Foundations in Diagnostic Pathology Series, 1st ed.*

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 Pathology in Clinical Practice, 2nd ed*

Debra G.B. Leonard

Springer 2016 ISBN: 9783319196732

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

Lauren Pecorino

OUP Oxford 2016 ISBN: 0198717342

5. *Molecular Testing in Cancer*

George M. Yousef and Serge Jothy (Eds)

Springer 2014 ISBN: 1489980490

7. *Molecular Oncology: Causes of Cancer and Targets for Treatment, 1st ed.*

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

Cambridge University Press 2014 ISBN: 0521876621

8. *Molecular Oncology Testing for Solid Tumors, 1st ed*



Michael Ola Idowu, Catherine Isabelle Dumur, Carleton Theodore Garrett
Springer 2015 ISBN: 978-3-319-16304-8

9. *Diagnostic Pathology: Molecular Oncology 2nd ed*
Mohammad Vasef, Aaron Auerbach
Elsevier 2019. ISBN: 0323611443

Hematopathology

1. *Molecular Haematology, 4th ed.*
Drew Provan and John Gribben, (Eds.)
Wiley-Blackwell 2019 ISBN: 1119252873

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, 2nd ed*
Tsieh Sun
Lippincott Raven 2011 ISBN: 1608316165

4. *Hematopathology, 2nd ed*
Elaine Sarkin Jaffe, Daniel A. Arber, Elias Campo, Nancy Lee Harris, Leticia Quintanilla-Martinez, and Altilio Orazi
Elsevier 2016. ISBN: 0323296130

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.) 2017 ISBN: 978-92-832-4494-3
- b. *Central Nervous System* D.N. Louis, H. Ohgaki, O.D. Wiestler, W. K. Cavenee. (Eds.) 2016 ISBN: 9283244923
- c. *Skin Tumours* DE Elder, D Massi, RA Scolyer R Willemze (Eds.) 2018 ISBN:978-92-832-2440-2
- d. *Soft Tissue and Bone Tumors, 5th edition, Volume 3* 2020 ISBN-13: 978-92-832-4502-5
- e. *Head and Neck* 2017 ISBN13: 978-92-832-2438-9

- f. *Urinary System and Male Genital Organs* 2016 ISBN13: 978-92-832-2437-2
- f. *Endocrine Organs* RV Lloyd, RY Osamura, G Kloppel, J Rosai (Eds.) 2017 ISBN: 9283244931
- g. *Lung, Pleura, Thymus and Heart* 2015 ISBN13: 978-92-832-2436-5
- h. *Breast Tumors* 2019 ISBN: 9283224337
- i. *Female Genital Tumors, 5th edition* 2020 ISBN-13: 978-92-832-4500-1
- j. *Digestive System Tumors WHO Classification of Tumours Editorial Board* (Eds.) 2019 ISBN: 978-92-832-4499-8
- L. *Thoracic Tumours. WHO Classification of Tumours, 5th Edition, Volume 5.* ISBN13: 978-92-832-4506-3

2. *Diagnostic Pathology and Molecular Genetics of the Thyroid: A Comprehensive Guide for Practicing Thyroid Pathology, 3rd ed.*
Yuri E Nikiforov, Paul W Biddinger, Lester D Thompson Lippincott Williams & Wilkins 2012 ISBN: 1496396537

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, 6th ed.*
Roger N. Rosenberg and Juan M. Pascual (Eds.)
Academic Press 2014 ISBN: 0128139552

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, 2nd ed*
Debra G.B. Leonard
Springer 2016 ISBN: 3319196732
New Edition Springer 2009 Softcover ISBN: 978038787373



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

Matthias A. Karajannis and David Zagzag (Eds) Springer 2015 ISBN: 149391829X

Reference Books

1. *Emery and Rimoin's Principles and Practice of Medical Genetics and Genomics, 7th ed*

Reed E. Pyeritz, Bruce R. Korf, Wayne W. Grody
Churchill Academic Press, 2018, ISBN: 0128125368

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>

3. *Lewin's Genes XII, Edition 12*

Jocelyn E. Krebs, Elliot S Goldstein and Stephen T. Kilpatrick Jones & Bartlett Learning, 2017 ISBN: 1284104494

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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