CURRICULUM VITAE **Barbara Ann Zehnbauer** **08/06/2018**

PERSONAL INFORMATION:

Place of Birth: St. Louis, Missouri
Marital Status: Married
Husband's Name: Timothy George Buchman, MD, PhD

CITIZENSHIP: United States of America

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PRESENT POSITIONS:

Adjunct Professor, Department of Pathology, Emory University, Atlanta, GA

Editor in Chief, *Journal of Molecular Diagnostics*, American Society for Investigative Pathology

EDUCATION:

Undergraduate:
1974 A.B., Biology, Southern Illinois University at Edwardsville

Graduate:
1977 S.M., Microbiology, University of Chicago

Postgraduate:
1979 Ph.D., Microbiology, University of Chicago

ACADEMIC POSITIONS/EMPLOYMENT:

2009- current Adjunct Professor, Department of Pathology, Emory University, Atlanta, GA

2016 – present Consultant, Amgen, Inc, Thousand Oaks, CA; Chair, Steering Committee for Diagnostic Quality Assurance Pilot

2014 – 2016 Temporary Detail, Acting Division Director, Division of Laboratory Systems; Center for Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention

2009- 2016 Senior Service Fellow and Branch Chief, Centers for Disease Control and Prevention

2004-2009 Professor of Pathology and Immunology, and Pediatrics;
1994 -2004 Associate Professor of Pathology and Immunology, and Pediatrics; Washington University School of Medicine, St. Louis, MO

	Director, Molecular Diagnostic Laboratory; Director, Molecular Core Laboratory, Siteman Cancer Center;
1986 - 1994	Assistant Professor of Oncology; Director, Recombinant DNA Diagnostic Laboratory, Johns Hopkins University School of Medicine, Baltimore, MD
1982 - 1986	Post-doctoral Fellow in Oncology, Johns Hopkins University School of Medicine, Baltimore, MD (Dr. Bert Vogelstein)
1980 - 1982	NIH Post-doctoral Trainee in Viral Oncology, University of Wisconsin, Madison, Wisconsin (Dr. Fred Blattner)

BOARD CERTIFICATION:

1993 - present	Diplomate, American Board of Medical Genetics with specialty certification in Clinical Molecular Genetics	
	2003	Maintenance of Certification Examination
	2005	Maintenance of Certification Examination
	2005 - 2007	Primary Writer – Clinical Molecular Genetics Certification Exam
	2007	Maintenance of Certification
	2009 - 2019	Maintenance of Certification
1994 - present	Fellow, American College of Medical Genetics and Genomics	
2013 -present	Fellow, National Academy of Clinical Biochemistry	

EDITORIAL RESPONSIBILITIES:

2015- 2019	Editor-in-Chief for: *Journal of Molecular Diagnostics*, American Society for Investigative Pathology, Bethesda, MD
2009 – 2014	Senior Associate Editor for: *Journal of Molecular Diagnostics*
2006 - 2009	Associate Editor for: *Journal of Molecular Diagnostics*

PROFESSIONAL SOCIETIES AND ORGANIZATIONS:

American Society for Human Genetics	1992 - present
American Board of Medical Genetics	1993-present
American College of Medical Genetics and Genomics	1994- present

Association for Molecular Pathology (AMP)

2001-2002	Genetics Subdivision, Chair-elect and Chair
2005	President-elect, Chair of Nominating Committee and Strategic Planning Committee liaison to Council
2006	President
2007	Past-President, Chair of Nominating Committee

2009-2010	Program Committee, Chair-elect and Chair
2009-2010	AMP Council
2010-2011	Member, Steering Committee for AMP Strategic Planning
2010 – 2013	Co-lead, Pharmacogenetics Interest Group
2013 – 2014	Liaison to American Association for Clinical Chemistry
2015	Recipient, AMP Jeffrey Kant Leadership Award
2015 - 2020	Member, Publications and Communications Committee
2016 - 2017	Member, AMP Awards Committee
2017 - 2023	Member, Professional Relations Committee

American Association for Clinical Chemistry (AACC)

1998- 2017	Member, Molecular Pathology Division
2003 –2014	Pharmacogenetics Committee
2003 – 2006	San Diego Conference - AACC Member of Organizing Committee
2005 – 2010	AACC Liaison to College of American Pathologists, Biochemical and Molecular Genetics Resource Committee
2008	Member, Organizing Committee for AACC conference: “Personalized Medicine in Oncology” 2009
2008	April: SYCL Mentor of the Month
2008- 2013	Member, Organizing Committee for Joint AMP-AACC course: "Molecular Pathology Essentials"
2010 - 2017	Member, Science and Education Committee, Molecular Pathology Division
2011 -2014	AACC Liaison to Association for Molecular Pathology
2012–2013	Member, Annual Meeting Organizing Committee (AMOC) for 2013 AACC Annual Meeting
2013 – present	Fellow, National Academy of Clinical Biochemistry

College of American Pathologists (CAP)

2002- present	Certified Laboratory Inspector, Molecular Pathology
2005- 2010	Biochemical and Molecular Genetics Resource Committee, AACC liaison;
2006- 2010	Member, Pharmacogenetics Working Group
2011	LAP Team Member Update Training
2012 – present	LAP Inspection Team Leader certification

Clinical and Laboratory Standards Institute (CLSI)

2009-2012	Co-Chair, Document Development Committee for revision of MM01-A2 “Molecular Diagnostic Methods for Genetic Diseases”
2010-2011	Advisor, Document Development Committee MM19 “Establishing Molecular Testing in a Clinical Laboratory” and MM20 “Quality Management for Genetic Testing”
2011	Advisor, Consensus Committee on Molecular Methods

	2011- 2015	Co-chair, Document Development Committee for MM23 "Molecular Diagnostic Methods for Solid Tumors (Nonhematological Neoplasms)"
	2012 - 2015	Vice-chairholder, Molecular Methods Consensus Committee
	2012 – 2016	Member, Chairholders Council
	2012	Recipient, Leadership and Service Award
	2013	Recipient, Excellence in Standards Development Award
	2013 - 2016	Member, Nominations Committee
	2016 – present	Chair, Molecular Methods Expert Panel
The Joint Commission	2015-2016	Member, Molecular Technical Advisory Panel
Tapestry Networks	2016 -present	Chair, Steering Committee for Diagnostic Quality Assurance Pilot to develop reference standards to validate laboratory developed test for companion diagnostic use. Derived from the Sustainable Predictive Oncology Therapeutics and Diagnostics (SPOT/Dx) working group.
US Food and Drug Administration	2015 – 2019	Member, Molecular and Clinical Genetics Panel, FDA Medical Devices Advisory Committee, Center for Devices and Radiological Health
	2018-2020	Contributor, Medical Device Innovation Consortium, Somatic Reference Samples Project, Center for Devices and Radiological Health

MAJOR INVITED LECTURESHIPS:

1994	Invited Lecturer, 13th Missouri Conference on Genetic Disorders, St. Louis, MO
1995	Invited Panelist, 48th Annual Cancer Symposium, Society of Surgical Oncology, Boston, MA
1995	Invited Lecturer, University of Missouri, Humanizing Genetic Testing
1995	Invited Lecturer, Lucille P. Markey Special Emphasis Pathway in Human Pathobiology, Washington University "Molecular Testing in Multiple Endocrine Neoplasia"
1997	Invited Lecturer, 4th International Congress on the Immune Consequences of Trauma, Shock, and Sepsis, Munich, Germany "Genetic Predisposition to Severe Sepsis"
1998	Invited Lecturer, 27th Critical Care Symposium, Society of Critical Care Medicine, San Antonio, Texas
1999	Invited Lecturer, 5th Annual Meeting Association for Molecular Pathology, St. Louis, MO; "RET Proto-oncogene Direct Mutation Testing" and "Troubleshooting DNA Sequencing in the Clinical Diagnostic Lab"

2000	Invited Lecturer, - Society for Critical Care Medicine, 29th Annual Symposium, Orlando FL; "The Ten Minute Geneticist" and "The Seven Deadly Sins of Clinical Molecular Diagnostics"
2000	Invited Lecturer – 5th World Congress on Trauma, Shock, Inflammation, and Sepsis; Munich, Germany; "Genetic Screening in the Intensive Care Unit"
2001	Invited Lecturer – Society for Critical Care Medicine, 30th Annual Symposium, Project Impact, San Francisco, CA; "Genetic Predisposition to Severe Sepsis"
2001	Invited Lecturer – Chiba University, Chiba, Japan; "Recent Progress in Pharmacogenetics"
2002	Invited Lecturer – Society for Critical Care Medicine, 31st Annual Symposium, San Diego, CA; "Genetics 101"
2002	Plenary Session Presentation, Association for Molecular Pathology, Dallas TX; "Detection of Imprinting Abnormalities in Beckwith Wiedemann Syndrome"
2003	Invited Speaker – Project IMPACT Users Group Meeting, San Antonio; "GenPSS Research Project Update"
2003	Invited Speaker – IBC USA LifeSciences Conference, Molecular Diagnostics; "Diagnostic clinical utility of pharmacogenetic polymorphisms in cancer treatment and response", Boston, MA
2003	Invited Speaker – Cerner, Inc./IBM e-seminar "Clinical Genomics: Now and Tomorrow"
2003	Invited Speaker – American Association of Clinical Chemistry, Annual meeting, Philadelphia, PA; EduTrak session "Molecular Investigations and Innovations in Immunology " : "Genetic Predisposition to Severe Sepsis"
2004	Invited Speaker – Medical College of Virginia, Department of Pathology Grand Rounds; "Clinical Utility of Pharmacogenetic Polymorphisms in Cancer Treatment and Response"
2004	Invited Lecturer – Society for Critical Care Medicine, 33rd Annual Congress, Orlando, FL; "Molecular Diagnostics as a Predictive Tool"
2004	Invited speaker - 6th World Congress on Trauma, Shock, Inflammation and Sepsis – Pathophysiology, Immune Consequences and Therapy, Munich, Germany; "Genetic Predisposition in the Response to Injury: Studies with Populations of Trauma Patients"
2006	Invited speaker – Third Wave Technologies, expert presentation at the American College of Medical Genetics Annual Meeting, San Diego, CA; "UGT1A1 – prospective genotyping for irinotecan therapy"

2006	Invited speaker – AACC Annual Meeting Chicago IL July 2006 – "AACC University: Principles of Molecular Diagnostics" and "Pharmacogenetics – The Clinical Lab Experience"
2006	Invited speaker – European Society of Intensive Care Medicine, 19th Annual Congress; Barcelona, Spain September 2006 – "Pharmacogenomics in the critically ill: What is going on?"
2006	Invited speaker – TmBiosciences, Toronto November 3; "GenPSS: Genetic Predisposition to Severe Sepsis"
2007	Invited speaker - 7th World Congress on Trauma, Shock, Inflammation and Sepsis – Pathophysiology, Immune Consequences and Therapy, Munich, Germany; "Impact of pharmacogenetics on clinical decision making in trauma and sepsis"
2007	Invited speaker – AACC Annual Meeting San Diego, CA July 2007 – "AACC University: Principles of Molecular Diagnostics" and "Prospective genotype-guided dose selection and clinical outcome scoring"
2007	Invited speaker – Department of Pathology, Medical College of Wisconsin, October 10; "Clinical Utility of Pharmacogenetics in Cancer Chemotherapy"
2008	Invited speaker and Co-chair – AMP-AACC Molecular Pathology Essentials course, Baltimore MD, May 12 -14; "Fragile X syndrome and FXTAS"; "Imprinting Disorders and Mitochondrial Diseases"; "Molecular monitoring of Hematopoietic Stem Cell Engraftment"
2008	Invited speaker – Clinical Ligand Assay Society, Coral Springs, FL , June 5, 2008; "Pharmacogenetics of Chemotherapy"
2008	Invited speaker – AACC Annual Meeting Washington, DC July 2008; "AACC University: Principles of Molecular Diagnostics"
2008	Invited speaker – 17th Beaumont Molecular Pathology Symposium, Troy , MI, September 11; "Pharmacogenomics – The Clinical Lab Experience"
2009	Invited speaker – 2nd Annual Update in Clinical and Laboratory Medicine, University of Utah School of Medicine, Park City, UT, February 26-27; "Laboratory Medicine Perspective of Warfarin Sensitivity Testing" and "Molecular Detection of Imprinting Defects".
2009	Invited speaker – FASEB – ASIP Postdoctoral Forum; New Orleans, LA, April 2009; "Career Opportunities in Clinical Diagnostics".
2009	Invited speaker – AACC Annual Meeting Chicago, IL July 2009; "AACC University: Principles of Molecular Diagnostics"
2009	Co-organizer and Speaker AMP-AACC Molecular Pathology Essentials Course; Copenhagen, Denmark; October 1-2, 2009;

	"Fragile X syndrome and FXTAS" and "Detection of Circulating Tumor Cells".
2009	Moderator and Chair-elect AMP Annual Meeting; Orlando, FL, November 19-22, 2010; "Career Development Workshop: A Look Inside the Options".
2010	Moderator and speaker, AMP Companion meeting to USCAP; Washington, DC, March 21, 2010; "Detection of Circulating Tumor Cells".
2010	Co-organizer and Speaker AMP-AACC Molecular Pathology Essentials: Principles and Practice course; Atlanta, GA; May 17-10, 2010; "Molecular Pathology Practices in Oncology".
2010	Moderator, AACC Annual Meeting Anaheim, CA, July 26, 2010; AACC Short Course "Molecular Diagnostic Testing: Practical Concerns and Good Laboratory Practices".
2010	Invited speaker, American Society of Human Genetics, Nov.6, 2010. "Oversight of Genetic Testing and Selection of the Patient-Specific Test".
2011	Moderator and Speaker, AACC Annual Meeting Atlanta, GA, July 28, 2011; Symposium "Laboratory-Developed Test Regulations: The Alphabet Soup of ASR, LDT, IVD, QA, QC, QSR".
2011	Moderator, AMP Annual Meeting in Grapevine,TX, November 19, 2011; Special Plenary "Pharmacogenomics: Molecular Genetics in Drug Development".
2012	Co-organizer and Moderator, AMP-AACC Molecular Pathology Essentials Course "Principles in Clinical Practice"; May 7-8, 2012 Chicago, IL.
2012	Invited speaker, Nordic Society of Clinical Chemistry Congress in Reykjavik, Iceland, June 14, 2012; "Direct-to-Consumer Genetic Tests: Risks and Benefits".
2012	Invited speaker, Association of Genetic Technologists, Atlanta GA, June 9, 2012; "Regulatory Compliance Challenges for Genetics Testing Labs"
2012	Invited speaker, Clinical and Laboratory Standards Institute, webinar, Oct. 9, 2012; "Molecular Genetic Testing: More Than Diagnosis"
2012	Invited speaker, CDC National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis Prevention series on Evaluation of Guidelines and Recommendations, Nov. 30, 2012; "Laboratory Medicine Best Practices".
2013	Invited panelist, International Collaboration for Clinical Genomics (ICCG) Meeting, May 9, 2013; Bethesda, MD , "Requiring Data Submission: Sticks vs Carrots".

2013	Moderator, American Association for Clinical Chemistry 2013 Annual Meeting, July 30, 2013, Houston, TX. Late-Breaking News Symposium "The US Supreme Court Decision on Human Gene Patents and Its Implications".
2014	Invited Faculty, American Association for Clinical Chemistry "Bringing Molecular Testing into the Clinical Lab" course, May 29-30, 2014, Washington, DC. Two presentations: "Regulatory Considerations" and "Looking Ahead to Post-Implementation (Ensuring Quality in Testing and Reporting)".
2016	Invited Plenary Speaker, Korean Society of Laboratory Medicine "Regulatory Oversight of Laboratory Developed Tests", April 9, 2016, Seoul, South Korea.
2016	Association for Molecular Pathology, Reference Materials Forum, "The SPOT/Dx Diagnostic Quality Assurance Pilot" Nov. 8, 2016, Charlotte, NC.
2016	Association for Molecular Pathology, Annual Meeting, "Precision Diagnosis is a Team Sport" Nov. 12, 2016, Charlotte, NC.
2017	Invited Faculty Speaker, Association for Molecular Pathology, "Pharmacogenetics" and "Laboratory Management", Molecular Genetic Pathology Review Course, June 1 - 4, 2017, Bethesda, MD.
2017	Association for Molecular Pathology, Reference Materials Forum, "The SPOT/Dx Diagnostic Quality Assurance Pilot: Update" Nov.14, 2017, Salt Lake City, UT.

RESEARCH INTEREST: Strengthening the laboratory workforce through education about laboratory quality, services, and policy; defining lab practices for certification compliance; Quality improvement in clinical molecular pathology and genetics

TEACHING EXPERIENCE:

January 1996 - June 2009: Departments of Pathology & Immunology, and Pediatrics, Washington University School of Medicine

Annually responsible for Molecular Diagnostic didactic sessions, case sign-outs, and/or laboratory projects for:

- 1st year Laboratory Medicine residents (6-9 trainees, 6 weeks per year)
- 2nd year Laboratory Medicine residents (3 trainees, 4 weeks each)
- 4th year Laboratory Medicine residents (3 trainees, 4 weeks each)
- Molecular Genetic Pathology fellows (2 trainees, 3 months each)
- Clinical Chemistry fellows (2- 3 trainees)
- 1-2 Hematopathology fellows
- 1 Pediatric Pathology fellow
- 1-2 Clinical Medical Genetics residents
- 2 Clinical Molecular Genetics fellows
- 2 Hematologic Oncology fellows (Pediatrics)
- 1st year medical students (focus groups of 20)
- 4th year medical students (8-10 per year)
- Nursing students of Jewish Hospital School of Nursing (class of 20)
- Continuing Medical Education for medical technologists

BIBLIOGRAPHY:

Articles Published in Professional Journals

1. Berg PE, Gayda R, Avni H, **Zehnbauer B**, Markovitz A: Cloning of Escherichia coli DNA That controls cell division and capsular polysaccharide synthesis. Proc Natl Acad Sci USA 1976; 73:697-701.

2. **Zehnbauer B**, Markovitz A: Cloning of a gene that controls radiation sensitivity, cell division, and capsular polysaccharide synthesis, the lon(capR) gene. In Hanawalt PC, Friedberg EC, Fox CF (eds.) DNA Repair Mechanisms (ICN-UCLA Symposia on Molecular and Cellular Biology, Vol. 9), pp. 797-800, Academic Press, New York, 1978.

3. **Zehnbauer BA:** The cloning of the capR gene of Escherichia coli K12 and the cloning of a DNA binding protein. Ph.D. Thesis, University of Chicago, 1979.

4. **Zehnbauer BA,** Markovitz A. Cloning of the lon (capR) gene of Escherichia coli K12 and identification of polypeptides specified by the cloned DNA fragment. J Bacteriol 1980;143:852-863.

5. **Zehnbauer BA**, Foley EC, Henderson GW, Markovitz A: Identification and purification of the Lon^+ ($CapR^+$) gene product, a DNA binding protein. Proc Natl Acad Sci USA 1981;2043-2047.

6. **Zehnbauer BA**, Vogelstein B: Supercoiled loops and the organization of replication and transcription in eukaryotes. BioEssays 1985;2:52-54.

7. Kinzler KW, **Zehnbauer BA**, Brodeur GM, Seeger RC, Trent JM, Meltzer PS, Vogelstein B: Amplification units containing human N-myc and c-myc genes. Proc Natl Acad Sci USA 1986;83:1031-1035.

8. **Zehnbauer BA,** Pardoll DM, Burke PJ, Graham ML,Vogelstein B: Immunoglobulin gene rearrangements in remission bone marrow specimens from patients with acute lymphoblastic leukemia. Blood 1986;67:835-838.

9. Fearon ER, Burke PJ, Schiffer CA, **Zehnbauer BA**, Vogelstein B: Differentiation of leukemia cells to polymorphonuclear leukocytes in patients with acute nonlymphocytic leukemia. New Engl J Med 1986;315:15-24.

10. Fearon ER, Burke PJ, **Zehnbauer BA**, Vogelstein B, Schiffer CA. Differentiation of blast cells in acute nonlymphocytic leukemia. N Engl J Med. 315:1488, 1986.

11. **Zehnbauer BA**, Small D, Brodeur GM, Seeger RC, Vogelstein B: Characterization of N-myc amplification units in human neuroblastomas. Mol Cell Biol 1988;8:522-530.

12. Kastan MB, **Zehnbauer BA**, Leventhal BG, Corden BJ, Dover GJ: Philadelphia-chromosome positive essential thrombocythemia. Am J Ped Hematol Oncol 1989;11:433-436.

13. Wagner JE, Santos GW, Noga SJ, Rowley SD, Davis J, Vogelsang GB, Farmer ER, **Zehnbauer BA**, Saral R, Donnenberg AD: Bone marrow graft engineering by counterflow centrifugal elutriation: results of a phase I-II clinical trial. Blood 1990;75:1370-1377.

14. Jones RJ, Miller CB, **Zehnbauer BA,** Rowley SD, Colvin OM, Sensenbrenner LL: In vitro evaluation of combination drug purging for autologous bone marrow transplantation. Bone Marrow Transpl, 1990;5:301-307.

15. Ambinder RF, Lambe BC, Mann RB, Hayward SD, **Zehnbauer BA,** Burns WS, Charache P: Oligonucleotides for polymerase chain reaction amplification and hybridization detection of Epstein-Barr virus DNA in clinical specimens. Mol Cell Probes J, 1990;4: 397-407.

16. Funkhouser AW, Vogelsang G, **Zehnbauer B**, Tunnessen WW, Beschorner WE, Sanders M, Graeber J: Graft-versus-host disease after blood transfusions in a premature infant. Pediatrics 1990;87: 247-250.

17. Schneider SS, **Zehnbauer BA**, Vogelstein B, Brodeur GM: Yeast artificial chromosome (YAC) vector cloning of the MYCN amplified domain in neuroblastomas. Prog Clin Biol Res.366:71-76, 1991. In Symposium of Advances in Neuroblastoma Research, 3, eds. A.E. Evans et al. New York: Wiley-Liss.

18. Cossman J, **Zehnbauer B**, Garrett C, Smith L,Williams M, Jaffe E, Hanson LO, Love J: Gene rearrangements in the diagnosis of lymphoma/leukemia: guidelines for use based on a multi-institutional study, Am J Clin Pathol, 1991;95:437-353.

19. Miller CB, **Zehnbauer BA,** Piantadosi S, Rowley SD, Jones RJ: Correlation of occult clonogenic leukemia drug sensitivity with relapse after autologous bone marrow transplantation. Blood 1991;78:1125-1131.

20. **Zehnbauer BA**, Griffin CA, Santos G, Wagner J: Comparison of molecular and cytogenetic methods in the evaluation of engraftment following allogeneic bone marrow transplantation. Cancer Genet Cytogenet 1991;55:181-190.

21. Nabors MW, Griffin CA, **Zehnbauer BA**, Hruban RH, Phillips, P.C., Grossman, S.A., Brem, H., Colvin, O.M. MDRI gene expression in human brain tumors. J Neurosurg 1991;75:941-946.

22. Griffin CA, **Zehnbauer BA**, Beschorner WE, Ambinder R, Mann R: Translocation between chromosomes 11 and 18 is a recurrent chromosome abnormality in small lymphocytic lymphoma. Genes Chromosomes Cancer 1992;4:153-157.

23. Wagner JE, Broxmeyer HE, Byrd RL, **Zehnbauer BA**, Schmeckpeper B, Shah N, Griffin CA, Emanuel PD, Zuckerman KS, Bias W, Santos GW: Transplantation of umbilical cord blood after myeloablative therapy: analysis of engraftment. Blood 1992;79:1874-1881.

24. Wagner JE, Vogelsang GB, **Zehnbauer BA,** Griffin CA, Shah N, Santos GW: Relapse of leukemia after bone marrow transplantation: effect of second myeloablative therapy. Bone Marrow Transplant 1992; 9:205-209.

25. Sidransky D, Tokino T, Helzlsouer K, **Zehnbauer B**, Rausch G, Shelton B, Prestigiacomo L, Vogelstein B, Davidson N: Inherited p53 Gene Mutations in Breast Cancer. Cancer Res 1992;52:2984-2986.

26. Wagner JE, Zahurak M, Piantadosi S, Geller RB, Vogelsang GB, Wingard JR, Saral R, Griffin C, Shah N, **Zehnbauer BA,** Ambinder R, Burns W, Jones R, May S, Rowley S, Yeager A, Santos GW: Bone marrow transplantation of chronic myelogenous leukemia in chronic phase: evaluation of risks and benefits. J Clin Oncol 1992;10:779-789.

27. Hawkins AL, Jones RJ, **Zehnbauer BA**, Zicha MS, Collector MJ, Sharkis SJ, Griffin CA: Fluorescence in situ hybridization to determine engraftment status after murine bone marrow transplant. Cancer Genet Cytogenet 1992;64:145-148.

28. Schneider SS, Hiemstra JL, **Zehnbauer BA**, Taillon-Miller P, LePaslier D, Vogelstein B, Brodeur GM: Isolation and structural analysis of a 1.2 megabase N-myc amplicon from a human neuroblastoma. Mol Cell Biol 1992;12:5563-70.

29. Bedi A, **Zehnbauer BA**, Collector MI, Barber JP, Zicha MS, Sharkis SJ, Jones RJ: BCR-ABL gene rearrangement and expression of primitive hematopoietic progenitors in chronic myeloid leukemia. Blood 1993;81:2898-2902.

30. Tokino T, Davidson N, Helzlsouer K, **Zehnbauer B**, Nakamura Y, Vogelstein B, Sidransky D: Absence of germline prohibitin mutations in early onset breast cancer. Int J Oncol 1993;3:769-772.

31. Gore SD, Donnenberg AD, **Zehnbauer BA**, Weng L-J, Burke PJ: Granulocyte-macrophage colony-stimulating factor (GM-CSF), given concurrently with induction therapy for acute myelogenous leukemia (AML), augments the syndrome of T-lymphocyte recovery. Leukemia 1994;8:409-419.

32. Bedi A, **Zehnbauer BA**, Sharkis SJ, Jones RJ: Inhibition of apoptosis by BCR-ABL in chronic myeloid leukemia. Blood 1994;83: 2038-2044.

33. Bedi A, Griffin CA, Barber JP, Vala MS, Hawkins AL, Sharkis SJ, **Zehnbauer BA**, Jones RJ: Eradication of chronic myeloid leukemia by cytokine-mediated terminal differentiation. Cancer Res. 1994;54: 5535-5538.

34. DiGiuseppe JA, Wu T-C, **Zehnbauer BA**, McDowell PR, Ambinder RF, Mann RB: Epstein-Barr virus and progression of non-Hodgkin's lymphoma to Ki-1-positive, anaplastic large cell phenotype. Mod. Path. 1995; 8: 553-559.

35. Buchman TG and **Zehnbauer BA**. Molecular biology in the intensive care unit: a framework for interpretation. New Horizons 1995; 3: 139-145.

36. Bedi A, Pasricha PJ, Akhtar AJ, Barber JP, Bedi GC, Giardello FM, **Zehnbauer BA**, Hamilton SR, Jones RJ. Inhibition of apoptosis during development of colorectal cancer. Cancer Res. 1995; 55: 1811-1816.

37. Issa, J-P J, **Zehnbauer, BA**, Civin, CI, Collector, MI, Sharkis, SJ, Davidson, NE, Kaufmann, SH, Baylin, SB. The estrogen receptor CpG island is methylated in most hematopoietic neoplasms. Cancer Research 55:973-977, 1996.

38. Pizer ES, Hruban RH, McGrath SD, Drachman DB, Bulkley GB, **Zehnbauer BA**. Evidence for ongoing thymocyte differentiation in thymomas and other thymic tissues. Am. J. Clin. Path. 105:262-267, 1996.

39. **Zehnbauer, B.A.** and Buchman, T.G. Clinical molecular genetics and critical care medicine. Crit. Care Med. 24:373-375, 1996.

40. Jones, RJ, Collector, MI, Barber, JP, Vala, MS, Fackler, MJ, May, WS, Griffin, CA, Hawkins, AL, **Zehnbauer, BA**, Hilton, J, Colvin, OM, Sharkis, SJ. Characterization of mouse lymphohematopoietic stem cells lacking spleen colony-forming activity. Blood 88:487-491, 1996.

41. Issa, J-P., **Zehnbauer, B.A.,** Kaufmann, S.H., Biel, M.A., and Baylin, S.B. HIC1 hypermethylation is a late event in hematopoietic neoplasms. Cancer Res. 57:1678-1681, 1997.

42. Chen, X., **Zehnbauer, B.A**., Gnirke, A., Kwok, P-Y. Fluorescence energy transfer detection as a homogeneous DNA diagnostic method. Proc. Natl. Acad. Sci., USA 94:10756-10761, 1997.

43. Musholt, P.B., Musholt, T.J., Goodfellow, P.J., **Zehnbauer, B.A.,** Wells, S.A., Moley, J.F. “Cold” single-stranded conformational variants for mutation analysis of the *ret* protooncogene. Surgery 122:363-370, 1997.

44. Khoury, H., Adkins, D., **Zehnbauer, B.,** Goodnough, L., Brown, R., Safdar, S., DiPersio, J.F. Essential thrombocythemia after allogeneic bone marrow transplantation for chronic myelogenous leukemia. Bone Marrow Transplantation 22:107-109, 1998.

45. Kaleem, Z., **Zehnbauer, B.A.,** White, G., Zutter, M.M. Lack of expression of surface immunoglobulin light chains in B-cell non-Hodgkin lymphomas. Am. Soc. Clin. Path. 113:399-405, 2000.

46. Daly, T.M., Rafii, A., Martin, R.A. and **Zehnbauer, B.A.** Novel Polymorphism in the FMR1 Gene Resulting in a “Pseudodeletion” of FMR1 in a Commonly Used Fragile X Assay. J. Mol. Diag. 2:128-131, 2000.

47. Freeman, BD, Schmieg, RE, Jr, McGrath, S, Buchman, TG, **Zehnbauer, BA**. Factor V Leiden mutation in a patient with warfarin-associated skin necrosis. Surgery 127:595-6, 2000.

48. Freeman, BD, **Zehnbauer, BA**, McGrath, SD, Borecki, I, Buchman, TG. Cytochrome P450 polymorphisms are associated with reduced warfarin dose. Surgery 128:281-285, 2000.

49. **Zehnbauer, BA**. Gender Differences in Sepsis: Genetically Determined? SHOCK 14:312-313, 2000.

50. Tabrizi, AR, Freeman, BD, Buchman, TG, **Zehnbauer, BA**. Genetic susceptibility to hemorrhagic complications during warfarin therapy. Surgery, 129:645-6, 2001.

51. Tabrizi, AR, **Zehnbauer, BA,** Freeman, BD, Buchman, TG. Genetic markers in sepsis. J. Am. Coll. Surg. 192:106-117, 2001.

52. Tabrizi, AR, McGrath, SD, Blinder, MA, Buchman, TG, **Zehnbauer, BA,** Freeman, BD. Extreme warfarin sensitivity in siblings associated with multiple cytochrome P450 polymorphisms. Amer. J. Hematol. 67:144-146, 2001.

53. Glass, AG, Donis-Keller, H, Mies, C, Russo, J, **Zehnbauer, B,** Taube, S, Aamodt, R. The cooperative breast cancer tissue resource: archival tissue for the investigation of tumor markers. Clin Cancer Res. 7:1843-9, 2001.

54. Raman,V, Clary, R, Siegrist, KL, **Zehnbauer, B**, Chatila, T. Increased prevalence of mutations in the cystic fibrosis transmembrane conductance regulator in children with chronic rhinosinusitis. Pediatrics 109:E13, 2002.

55. Tabrizi, AR, **Zehnbauer, BA**, Borecki, IB, McGrath, SD, Buchman, TG, Freeman, BD. The frequency and effects of cytochrome P450 (CYP) 2C9 polymorphisms in patients receiving warfarin. J. Am. Coll. Surg. 194:267-273, 2002.

56. Blum W, Brown R, Lin HS, **Zehnbauer B**, Khoury H, Goodnough LT, Westervelt P, Vij R, DiPersio J, Adkins D. Low-dose (550 cGy), single-exposure total body irradiation and cyclophosphamide: consistent, durable engraftment of related-donor peripheral blood stem cells with low treatment-related mortality and fatal organ toxicity. Biol. Blood Marrow Transplant. 8:608-618, 2002.

57. Freeman, BD, Buchman, TG, McGrath, SD, Tabrizi, AR, **Zehnbauer, BA.** The application of TDI-FP to detection of SNPs in genes of inflammatory mediators implicated in the sepsis syndrome. J. Mol. Diag. 4:209-215, 2002.

58. Gite, S, Lim, M, Carlson, R, Olejnik, J, **Zehnbauer, B**, Rothschild, K. A high-throughput nonisotopic protein truncation test. Nature Biotechnology **21**:194 – 197, 2003.

59. Freeman, BD, **Zehnbauer, BA**, Buchman, TG. A meta-analysis of controlled trials of anticoagulant therapies in patients with sepsis. Shock 20:5-9, 2003.

60. Freeman, BD, Buchman, TG, **Zehnbauer, BA**. Template-directed dye-terminator incorporation with fluorescence polarization detection for analysis of single nucleotide polymorphisms associated with cardiovascular and thromboembolic disease. Thromb Res. 2003;111:373-9, 2003.

61. Lairmore TC, Piersall LD, DeBenedetti MK, Dilley WG, Mutch MG, Whelan AJ, **Zehnbauer BA**. Clinical genetic testing and early surgical intervention in patients with multiple endocrine neoplasia type1 (MEN1). Ann. Surg. 239:637-647, 2004.

62. Saleh, M, Vaillancourt, JP, Graham, RK, Huyck, M, Srinivasula, SM, Alnemri, ES, Steinberg, MH, Nolan, V, Baldwin, CT, Hotchkiss, RS, Buchman, TG, **Zehnbauer, BA**, Hayden, MR, Farrer, LA, Roy, S, Nicholson, DW. Differential modulation of endotoxin responsiveness by human caspase-12 polymorphisms. Nature 429: 75 – 79, 2004.

63. Pham, CTN, Ivanovich, JL, Raptis, SZ, **Zehnbauer, B,** Ley, TJ. Papillon-Lefe`vre Syndrome: Correlating the Molecular,Cellular, and Clinical Consequences of Cathepsin C/Dipeptidyl Peptidase I Deficiency in Humans. J. Immunol. 173: 7277–7281, 2004.

64. Martin, RA, Grange, DK, **Zehnbauer, B,** DeBaun, MR. LIT1 and H19 methylation defects in isolated hemihyperplasia. Am J Med Genet, 134:129-31, 2005.

65. **Zehnbauer, B.** Population genetics in critical illness. Crit Care Med. 33:242-3, 2005.

66. Meyer JS, Alvarez C, Milikowski C, Olson N, Russo I, Russo J, Glass A, **Zehnbauer BA,** Lister K, Parwaresch R. Breast carcinoma malignancy grading by Bloom-Richardson system vs proliferation index: reproducibility of grade and advantages of proliferation index. Mod Pathol., 18:1067-78, 2005. *and* 18:1649, 2005 correction.

67. Freeman, BD, **Zehnbauer, BA.** Pharmacogenetics. Check Sample, Clinical Chemistry 45:67-81, 2005.

68. Sharma, MK, **Zehnbauer, BA**, Watson, MA, Gutmann, DH. RAS pathway activation and an oncogenic RAS mutation in sporadic pilocytic astrocytoma. Neurology , 65: 1335-6, 2005.

69. Freeman, BD, Kennedy, CR, Coopersmith, CM, **Zehnbauer, BA**, Buchman, TG. Genetic research and testing in critical care: surrogates' perspective. Crit Care Med. 34:986-94, 2006.

70. **Zehnbauer, BA**. Molecular Pathology: Then, Now and Tomorrow. ADVANCE for Administrators of the Laboratory 2007, 16:18.

71. Halldórsdóttir AM, **Zehnbauer BA**, Burack WR. Application of BIOMED-2 clonality assays to formalin-fixed paraffin embedded follicular lymphoma specimens: superior performance of the IGK assays compared to IGH for suboptimal specimens. Leuk Lymphoma. 48:1338-43, 2007.

72. Descartes, M, Robb Romp, R, Franklin, J, Biggio, JR and **Zehnbauer, B.** Constitutional H19 Hypermethylation in a Patient With Isolated Cardiac Tumor. Am. J. Med. Gen. Part A 146A:2126–2129, 2008.

73. Freeman BD, Dixon DJ, Coopersmith CM, **Zehnbauer BA**, Buchman TG. Pharmacoepidemiology of QT-interval prolonging drug administration in critically ill patients. Pharmacoepidemiol Drug Saf. 17(10):971-981, 2008.

74. Sobel ME, Bagg A, Caliendo AM, Ladanyi M, **Zehnbauer B**. The evolution of molecular genetic pathology: advancing 20th-century diagnostic methods into potent tools for the new millennium. J. Mol. Diagn.10:480-3, 2008.

75. Klco JM, Kreisel FH, **Zehnbauer BA**, Kulkarni S, Hassan A, Frater JL. The spectrum of adult B-lymphoid leukemias with BCR-ABL: molecular diagnostic, cytogenetic, and clinical laboratory perspectives. Am J Hematol. 83:901-7, 2008.

76. Watanabe E, **Zehnbauer B**, Deutschman CS. Genetic variability and outcome in the critically ill: avoiding SNP judgments. Crit Care Med. 37:357-60, 2009.

77. Duncavage EJ, **Zehnbauer BA**, Pfeifer JD. Prevalence of Merkel cell polyomavirus in Merkel cell carcinoma. Mod. Pathol. 22:516-521, 2009.

78. Barker SD, Bale S, Booker J, Buller A, Das S, Friedman K, Godwin AK, Grody WW, Highsmith E, Kant JA, Lyon E, Mao R, Monaghan KG, Payne DA, Pratt VM, Schrijver I, Shrimpton AE, Spector E, Telatar M, Toji L, Weck K, **Zehnbauer B,** Kalman LV. Development and characterization of reference materials for MTHFR, SERPINA1, RET, BRCA1, and BRCA2 genetic testing J Mol Diagn. 2009. 11:553-61.

79. Watanabe E, Buchman TG, Hirasawa H, **Zehnbauer BA**. Association between lymphotoxin-alpha (tumor necrosis factor-beta) intron polymorphism and predisposition to severe sepsis is modified by gender and age. Crit Care Med. 2010;38:181-93.

80. Freeman BD, Kennedy CR, Frankel HL, Clarridge B, Bolcic-Jankovic D, Iverson E, Shehane E, Celious A, **Zehnbauer BA**, Buchman TG Ethical considerations in the collection of genetic data from critically ill patients: What do published studies reveal about potential directions for empirical ethics research? Pharmacogenomics J. 2010; 10: 77-85.

81. Parikh BA and **Zehnbauer BA**. Beckwith-Wiedemann Syndrome: The Role of Molecular Diagnostic Testing in Patient Care. Check Sample, Clinical Chemistry Amer. Soc. Clin. Pathol. 2010; 50: 45-58

82. Lennerz JK, Timmerman RJ, Grange DK, DeBaun MR, Feinberg AP, **Zehnbauer BA.** Addition of H19 'Loss of Methylation Testing' for Beckwith-Wiedemann Syndrome (BWS) Increases the Diagnostic Yield. J Mol Diagn 2010; 12: 576-588.

83. Pratt VM, **Zehnbauer B**, Wilson JA, Baak R, Babic N, Bettinotti M, Buller A, Butz K, Campbell M, Civalier C, El-Badry A, Farkas DH, Lyon E, Mandal S, McKinney J, Muralidharan K, Noll L, Sander T, Shabbeer J, Smith C, Telatar M, Toji L, Vairavan A, Vance C, Weck KE, Wu AH, Yeo KT, Zeller M, Kalman L. Characterization of 107 Genomic DNA Reference Materials for CYP2D6, CYP2C19, CYP2C9, VKORC1, and UGT1A1: A GeT-RM and Association for Molecular Pathology Collaborative Project. J Mol Diagn. 2010;12: 835-46.

84. Pfeifer JD, **Zehnbauer B**, Payton J. The Changing Spectrum of DNA-Based Specimen Provenance Testing in Surgical Pathology. Am J Clin Pathol. 2011 Jan;135(1):132-8.

85. Tan BR, Thomas F, Myerson RJ, **Zehnbauer B,** Trinkaus K, Malyapa RS, Mutch MG, Abbey EE, Alyasiry A, Fleshman JW, McLeod HL. Thymidylate Synthase Genotype-directed Neoadjuvant Chemoradiation for Patients with Rectal Adenocarcinoma. J Clin Oncol. 2011 Mar.2(7):875-83.

86. **Zehnbauer B.** Editorial: Direct-to-Consumer Genetics Testing – Fair Comparisons? Clin Chem 2011 Mar;57(3):369-71.

87. Yeung CC, Powers ML, Kreisel F, Frater JL, **Zehnbauer** BA, Burack R, Hassan A. Relevance of IgVH Gene Somatic Hypermutation and Interphase Cytogenetics in Lymphomatous Presentation of Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma. Int J Surg Pathol 2011 Oct;19:563-9.

88. Chen B, **Zehnbauer B.** Rapid Expansion: Increasing approvals broaden availability of molecular genetic tests. *Advance for the Laboratory Administrator,* 2011 Molecular Diagnostics Edition, Special Issue. Published December 2011, 19-22.

89. Weck KE, **Zehnbauer B**, Datto M, Schrijver I. Molecular genetic testing for fragile X syndrome: laboratory performance on the College of American Pathologists proficiency surveys (2001-2009). Genet Med. 2012 14:306-12.

90. Funkhouser WK, Lubin IM, Monzon FA, **Zehnbauer BA**, Evans JP, Ogino S, Nowak JA. Relevance, Pathogenesis, and Testing Algorithm for Mismatch Repair-Defective Colorectal Carcinomas: A Report of the Association of Molecular Pathology. J Mol Diagn. 2012; 14:91-103.

91. Watanabe E, **Zehnbauer BA,** Oda S, Sato Y, Hirasawa H, Buchman TG. Tumor necrosis factor -308 polymorphism (rs1800629) is associated with mortality and ventilator duration in 1057 Caucasian patients. Cytokine. 2012; 60:249-56.

92. Gargis AS, Kalman L, Berry MW, Bick DP, Dimmock DP, Hambuch T, Lu F, Lyon E, Voelkerding KV, **Zehnbauer** BA, Agarwala R, Bennett SF, Chen B, Chin EL, Compton JG, Das S, Farkas DH, Ferber MJ, Funke BH, Furtado MR, Ganova-Raeva LM, Geigenmüller U, Gunselman SJ, Hegde MR, Johnson PL, Kasarskis A, Kulkarni S, Lenk T, Liu CS, Manion M, Manolio TA, Mardis ER, Merker JD, Rajeevan MS, Reese

MG, Rehm HL, Simen BB, Yeakley JM, Zook JM, Lubin IM. Assuring the quality of next-generation sequencing in clinical laboratory practice. Nat Biotechnol. 2012; 30:1033-6.

93. Kalman LV, Lubin IM, Barker S, du Sart D, Elles R, Grody WW, Pazzagli M, Richards S, Schrijver I, **Zehnbauer B.** Current Landscape and New Paradigms of Proficiency Testing and External Quality Assessment for Molecular Genetics. Arch Pathol Lab Med. 2013; 137:983-988.

94. Goff LW, Thakkar N, Du L, Chan E, Tan BR, Cardin DB, McLeod HL, Berlin JD, **Zehnbauer BA**, Fournie C, Picus J, Wang-Gillam A, Lee W, Lockhart AC. Thymidylate Synthase Genotype-Directed Chemotherapy for Patients with Gastric and Gastroesophageal Junction Cancers, PLoS One. 2014; 9(9): e107424.

95. Zehnbauer, BA. Continuing Excellence**.** J Mol Diagn 2015; 1.

96. Gargis A, Kalman L, Bick D, DaSilva C, Dimmock D, Funke B, Gowrisankar S, Hegde M, Kulkarni S, Mason C, Nagarajan R, Voelkerding K, Worthey E, Aziz N, Barnes J, Bennett S, Bisht H, Church D, Dimitrova Z, Gargis S, Hafez N, Hambuch T, Hyland F, Luna R, MacCannell D, Mann T, McCluskey M, McDaniel T, Ganova-Raeva L, Rehm H, Reid J, Campo D, Resnick R, Ridge P, Salit M, Skums P, Wong L-J, **Zehnbauer BA,** Zook J, Lubin IM. Good Laboratory Practices for Next-Generation Sequencing Informatics Pipelines, Nature Biotechnology 2015; 33:689-693.

97. **Zehnbauer BA**, Buchman TG. Precision Diagnosis is a Team Sport. Crit Care Med 2016; 44: 229-230.

98. **Zehnbauer BA**, Buchman TG. Precision Diagnosis is a Team Sport. J Mol Diagn 2016; 18: 1-2.

99. Chih-Wen Cheng, Hang Wu, Thompson PJ, Taylor JR, **Zehnbauer BA**, Wilson KK, Wang MD. Anticoagulation manager: development of a clinical decision support mobile application for management of anticoagulants. Conf Proc IEEE Eng Med Biol Soc. 2016 Aug;2016:2582-2585.

100. Buchman TG, Billiar TR, Elster E, Kirk AD, Rimawi RH, Vodovotz Y, **Zehnbauer BA**. Precision Medicine for Critical Illness and Injury. Crit Care Med. 2016 Sep;44(9):1635-8.

101. **Zehnbauer B**, Lofton-Day C, Pfeifer J, Shaughnessy E, Goh L. Diagnostic Quality Assurance Pilot: A Model to Demonstrate Comparative Laboratory Test Performance with an Oncology Companion Diagnostic Assay. J Mol Diagn. 2017 Jan;19(1):1-3.

102. **Zehnbauer B**, Temple-Smolkin R, Monzon FA. Guidelines for Colorectal Cancer Testing: Evidence-Based Practice Recommendations. J Mol Diagn. 2017 Mar;19(2):183-186.

103. **Zehnbauer B**, Essex EH, Chauhan C. Navigating the Peer Review Process. J Mol Diagn. 2018 Jan;20(1):1-3.

104. **Zehnbauer B**. Keeping Practice Recommendations in Step with Advancing Knowledge. J Mol Diagn. 2018 Mar;20(2):127-128.

Book Chapters

1. **Zehnbauer BA**, Blattner FR: Construction and screening of recombinant DNA libraries with Charon Vector Phages. In Genetic Engineering, Vol. 4, Setlow, J. and Hollander, A. (eds.) pp. 249-279, Plenum Publishing Corp., New York, 1981.

2. Ambinder RF, Wu T-C, Lambe B, Zahng J, Charache P, **Zehnbauer BA**, Hayward GS. Mann RB: Epstein-Barr Virus and Human Disease 1990. Humana Press, Inc., Clifton New Jersey, 1991.

3. Buchman TG, **Zehnbauer BA**: Signals and Messages: Molecular Biology in the ICU. In Critical Care: State of the Art, eds. Carlson, R.W. and Reines, H.D. Soc. Crit. Care Med., 1992.

4. Radford DM and **Zehnbauer BA**: Inherited breast cancer. In Surgical Clinics of North America, ed. Lopez, MJ. WB Saunders Co., Philadelphia, 1996; 76: 205-220.

5. **Zehnbauer BA** and Buchman TG: Molecular biology and surgical disease. In Modern Surgical Care, ed. Miller, TA. Quality Medical Publishing, Inc., St. Louis, MO, 1998 2nd edition.

6. **Zehnbauer, BA**, Freeman, B, Buchman, TG. 1998. Genetic Predisposition to Sepsis and Organ Failure. In: Sepsis and Organ Dysfunction, From Basics to Clinical Approach, Baue AE, Berlot G, Gullo A, Vincent J-L (eds.),Springer-Verlag: Italia Milano, 1999, 49-53.

7. Buchman, TG and **Zehnbauer, BA.** Regulation of Gene Expression. In: Textbook of Critical Care, 4th edition, Shoemaker, Ayres, Grenvik, Holbrook (eds.) WB Saunders Co., Philadelphia,1999, 606-613.

8. **Zehnbauer, B.A.,** Romkes, M, Carcillo, J.A. Genetic influences on critical illness. In: Textbook of Critical Care, 4th edition, Shoemaker, Ayres, Grenvik, Holbrook (eds.) WB Saunders Co., Philadelphia,1999, 613-620.

9. Freeman, BD, **Zehnbauer, BA.** Genetic Susceptibility to Infection and Sepsis. In: Evolving Concepts in Sepsis and Septic Shock. P. Q. Eichacker, and J. Pugin, (eds.), Kluwer Academic Publishers, Norwell, MA, 2001.

10. **Zehnbauer, BA**, Freeman, BD, Buchman, TG. Molecular Epidemiology: Beyond Gene Discovery to Clinical Diagnostic Tools. In: Surgical Research. WW Souba and DW Wilmore (eds.), 2001.

11. Freeman, BD, Buchman, TG, Stuber F, **Zehnbauer, BA**. Genetic and genomic aspects of the immunoinflammatory response. In: Trauma, 5th ed., Moore E, Feliciano D, & Mattox K. (eds), McGraw-Hill, NY, NY, 2003.

12. **Zehnbauer, BA.** Clinical testing of patient specimens. In: Molecular Genetic Testing in Surgical Pathology. J.D. Pfeifer (ed.) Lippincott, Williams, & Wilkins, Philadelphia, PA, 2006.

13. **Zehnbauer, BA.** Multiple Endocrine Neoplasia Syndromes**.** In: Molecular Pathology in Clinical Practice. DGB Leonard, A Bagg, A Caliendo, K Kaul, VM Van Deerlin (eds.) Springer-Verlag, 2007.

14. Love**-**Gregory, L, **Zehnbauer, B**, Dietzen. Genotype-Phenotype Correlations in Cystic Fibrosis. In: Tietz's Applied Laboratory Medicine, 2nd ed. MG Scott, AM Gronowski, CS Eby (eds.) John Wiley & Sons, Inc. Hoboken, NJ 2007.

15. Bhattacharya, S, **Zehnbauer, B**, Freeman, B. A 46-Year-Old Female with a Painful, Swollen Right Calf. In: Tietz's Applied Laboratory Medicine, 2nd ed. MG Scott, AM Gronowski, CS Eby (eds.) John Wiley & Sons, Inc. Hoboken, NJ 2007.

16. **Zehnbauer, BA,** Pfeifer, JD. Molecular Diagnostics. In: The Washington Manual of Oncology, 2nd ed. R. Govindan (ed.) Lippincott, Williams, & Wilkins, Philadelphia, PA, 2007.

17. **Zehnbauer, BA,** Pfeifer, JD. PCR-based Methods for Molecular Genetic Testing. In: The Washington Manual of Surgical Pathology, Humphrey, PA, Dehner, LP, Pfeifer, JD (eds.) Lippincott, Williams, & Wilkins, Philadelphia, PA, 2008.

18. **Zehnbauer, BA**, Nasser, M. Targeted Therapies in Hematologic Malignancies. In: Hematopathology: Genomic Mechanisms of Neoplastic Disease, Crisan, D. (ed.) Humana Press, Totowa, NJ, 2010.

19. Nguyen, TD, **Zehnbauer, B**, Pfeifer J. PCR-based Methods for Molecular Genetic Testing. In: The Washington Manual of Surgical Pathology, Second Edition. Humphrey, PA, Dehner, LP, Pfeifer, JD (eds.) Lippincott, Williams, & Wilkins, Philadelphia, PA, 2011.

20. Anderson, JL, **Zehnbauer, BA.** Clonal Gene Rearrangements Resolved by Microfluidic Chip. In: Microfluidics for Nucleic Acid Analysis, Methods in Molecular Biology, O'Kane, D (ed.) Humana Press, Totowa, NJ, 2012.

21. **Zehnbauer, BA.** Multiple Endocrine Neoplasia Syndromes**.** In: Molecular Pathology in Clinical Practice, Second Edition. DGB Leonard, A Caliendo, E Lyon, H Rennert, I Schrijver, AR Sepulveda, VM Van Deerlin (eds.) Springer-Verlag, 2016.

22. **Zehnbauer, BA** and Faucett, A. Why Laboratory Regulation is Important for Genetic Counselors and Other Genetics Professionals. In: Practical Genetic Counseling for the Laboratory. ML Goodenburger, BC Thomas,T Kruisselbrink (eds) Oxford Univ. Press, 2017.