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**EDUCATION AND TRAINING**

9/1979 – 7/1984	Doctorate of Medicine, M.D. Hunan Medical College (currently Xiangya School of Medicine, Central South University), Changsha, Hunan, China
9/1984 – 7/1987	Master of Science, M.Sc. in Microbiology and Immunology Hunan Medical College (currently Xiangya School of Medicine, Central South University), Changsha, Hunan, China
9/1989 – 2/1991	Postdoctoral Research Fellowship University of Colorado, School of Medicine, Denver CO.
3/1991 – 2/1994	Postdoctoral Research Fellowship Harvard Medical School, Boston MA.
5/1995 – 6/1999	Residency in Anatomic and Clinical Pathology Dartmouth-Hitchcock Medical Center, Lebanon, NH
7/1999 – 6/2001	Fellowship in Hematopathology University of Nebraska Medical Center, Omaha, NE

**LICENSURES AND CERTIFICATIONS**

1995	State of New Hampshire, currently inactive, RT306.
1998	State of Nebraska, currently inactive, 21010.
2001	State of Oregon, currently inactive, 22893.
2008	State of Michigan, currently active, 4301091814.
1994	Educational Commission for Foreign Medical Graduates.
2000	American Board of Pathology, Anatomic & Clinical Pathology.
2002	American Board of Pathology, Hematology.
2005	Oregon Health & Science University, Real-World Entrepreneurship.
2016	American Society for Clinical Pathology, Lab Management University.
2016	Stanford University Clinical Teaching Curriculum.

**PROFESSIONAL, ACADEMIC, ADMINISTRATIVE, AND CLINICAL POSITIONS****Academic Positions**

1987 – 1989	Instructor, Microbiology and Immunology, Hunan Medical University, China
1994 – 1995	Scientific Research Associate Schepens Eye Research Institute, Harvard Medical School, Boston MA
2001 – 2008	Assistant Professor, Pathology Oregon Health & Science University, Portland, OR
2009 – present	Associate Professor, Pathology Oakland University William Beaumont School of Medicine, Rochester, MI

**Administrative Positions**

2001 – 2008	Medical Director, Clinical Flow Cytometry Service Oregon Health & Science University, Portland, OR
2008 – present	Associate Medical Director, Clinical Flow Cytometry Laboratory Corewell Health East University William Beaumont Hospital, Royal Oak, MI
2013 – 2019	Co-Director, Diagnostic Medicine Clerkship Corewell Health East University William Beaumont Hospital, Royal Oak, MI
2016 – 2019	Director, Clinical Pathology Elective Corewell Health East University William Beaumont Hospital, Royal Oak, MI

**Clinical Positions**

2001 – 2008	Hematopathologist Oregon Health & Science University Hospital, Portland OR.
2008 – present	Hematopathologist Corewell Health East University William Beaumont Hospital, Royal Oak, MI

**PROFESSIONAL MEMBERSHIPS**

1999 – present	The United States and Canadian Academy of Pathology
1999 – present	Society for Hematopathology
2001 – present	Clinical Cytometry Society
2001 – present	College of American Pathologists
2001 – 2008	Oregon Society of Pathologists
2008 – present	Michigan Society of Pathologists

**PUBLICATIONS****Peer-Reviewed**

**Huang Z** and Wu J. Detection of cytomegalovirus specific IgM in cord blood by a solid- phase radioimmunoassay. Bulletin of Hunan Medical University 1988;13:314-316.

**Huang Z**, Abbas V and Hayward AR. Specific lysis of targets expressing VZV gpl and gplIV by CD4 positive cloned T cells. J. Virol. 1992;66:2664-2669.

Wickham LA, **Huang Z**, Lambert RW, Sullivan DA. Sialodacryoadenitis virus infection of rat lacrimal gland acinar cells. *Adv Exp Med Biol.* 1994;350:193-6.

**Huang Z**, Lambert RW, Wickham LA, Sullivan DA. Influence of the endocrine environment on herpes virus infection in rat lacrimal gland acinar cells. *Adv Exp Med Biol.* 1994;350:189- 92.

Wickham LA, **Huang Z**, Lambert RW, Sullivan DA. Herpes- and corona-virus infection of rat lacrimal acinar cells. *Adv Exp Med Biol.* 1995;371B:999-1002.

**Huang Z**, Lambert RW, Wickham LA and Sullivan DA. Analysis of cytomegalovirus infection and replication in acinar epithelial cells of the rat lacrimal gland. *Invest Ophthalmol Vis Sci* 1996; 37:1174-1186.

Wickham A, **Huang Z**, Lambert RW, Sullivan DA. Effect of sialodacryoadenitis virus exposure on acinar epithelial cells from the rat lacrimal gland. *Ocular Immunol Immunopathol* 1997;5:181-195.

Rocha EM, Wickham LA, **Huang Z**, Toda I, Gao J, Silveira LA and Sullivan DA. Presence and testosterone influence on the levels of anti- and pro- inflammatory cytokines in the lacrimal tissues of a mouse model of Sjögren's syndrome. *Adv Exp Med Biol* 1998; 438:485- 492.

Pickering DL, Nelson M, Chan, WC, **Huang, J**, Dave, Bhavana, Sanger, WG. Paraffin tissue core sectioning. An improved technique for whole tissue extraction and interphase FISH. *J Assoc of Genet Techol* 2001;27(2):38-40.

Ohno T, **Huang J**, Kwang HP, Wu G, Weisenburger DD and Chan WC. Direct demonstration by single cell analysis that lymphocytic and histiocytic cells in nodular lymphocyte predominance Hodgkin's disease is clonally related to the large cell lymphoma in the same individual. *American Journal of Clinical Pathology*. 2001;116:506-511.

Chan WC and **Huang, J**. Gene expression analysis in aggressive NHL. *Ann Hematol* 2001;80:B38-B41.

**Huang J**, Sanger WG, Greiner TC, Staudt LM, Weisenburger, DD, Pickering DL, Lynch JC, Armitage JO, Warnke RA, Alizadeh AA, Lossos IS, Levy R, and Chan WC. The t(14;18) defines a unique subset of diffuse large B-cell lymphoma (DLBCL) with a germinal center B- cell gene expression profile. *Blood* 2002;99(7):2285-2290.

**Huang JZ**, Weisenburger DD, Vose JM, Greiner TC, Aoun P, Chan WC, Lynch JC, Bierman PJ, Armitage JO. Diffuse large B-cell lymphoma arising in nodular lymphocyte predominant Hodgkin lymphoma. A report of 21 cases from the Nebraska Lymphoma Study Group. *Leuk Lymphoma*. 2003;44(11):1903-10 and 2004;45(8):1551-7

Shen Y, Iqbal J, **Huang J**, Zhou G, Chan WC. BCL2 protein expression parallels its mRNA level in normal and malignant B. *Blood*. 2004;104(9):2936-9.

**Huang J**, Fan G, Zhong Y, Gatter K, Braziel R, Gross G, Bakke A. Diagnostic usefulness of aberrant CD22 expression in differentiating neoplastic cells of B-Cell chronic lymphoproliferative disorders from admixed benign B cells in four-color multi-parameter flow cytometry. *Am J Clin Path*. 2005;123(6):826-32.

Fan G, Molstad M, Braziel R, Standley M, **Huang J**, Rodgers W, and Nagalla S. Proteomic Profiling of Mature CD10-Positive B-Cell Lymphomas. *Am J Clin Path*. 2005;124 (6):920-9.

Bakke AC, Purtzer Z, Leis J, and **Huang J**. A robust ratio metric method for analysis of Zap-70 expression in chronic lymphocytic leukemia (CLL). *Cytometry B Clin Cytom*. 2006; 70(4):227-34.

Zhong Y, Bakke AC, Fan G, Braziel R, Gatter KM, Leis JF, Maziarz RT, and **Huang J.** Drug Resistance in B-Cell Chronic Lymphocytic Leukemia Is Predictable by In-Vitro Evaluation with a Multi-Parameter Flow Cytometric Cytotoxicity Assay. *Cytometry B Clin Cytom.* 2007; 72B (3), 189-95.

**Note:** Zhong Y received a Janis Giorgi young investigator award on this project from Clinical Cytometry Society

Wen J, Cheng HY, Feng Y, Rice L, Liu S, Mo A, **Huang J**, Zu Y, Ballon DJ, Chang CC. P38 MAPK inhibition enhances ATO-induced cytotoxicity against multiple myeloma cells. *Br J Haematol.* 2008; 140(2):169-180.

Young KH, Leory K, Møller MB, Sánchez-Beato M, Colleoni GWB, Kerbauy FR, Haioun C, Gaulard P, Piris MA, Eickhoff JC, Rehrauer WM, Oberley TD, Kahl BS, Malter JS, Campo E, Delabie J, Gascogne RD, Rosenwald A, **Huang J**, Braziel RM, Jaffe ES, Wilson WH, Staudt LM, Chan WC, Weisenburger DD, and Greiner TC. Structural Profiles of p53 Gene Mutations Predict Poor Clinical Outcome in Diffuse Large B-Cell Lymphoma: An International Collaborative Study. *Blood.* 2008;112(8):3088-98.

Troxell ML, Dunlap JB, Mittalhenkle A, Mlshag M, Fan G, **Huang J**, Gatter K, Byrd D, Webster D, and Houghton, DC. Rejection versus Post-Transplant Lymphoproliferative Disorder in a Renal Transplant Recipient. *Am J Kidney Dis.* 2008;52(6):1174-9.

Galderisi F, Stork L, Li J, Mori M, Mongoue-Tchokote S, and **Huang J.** Flow cytometric chemosensitivity assay as a predictive tool of early clinical response in acute lymphoblastic leukemia. *Pediatric Blood & Cancer.* 2009;53 (4): 543 – 550.

Dunlap J, Kelemen K, Leeborg N, Braziel R, Olson S, Press R, **Huang J**, Gatter K, Loriaux M, Fan G. Association of JAK2 Mutation Status and Cytogenetic Abnormalities in Myeloproliferative Neoplasms and Myelodysplastic/Myeloproliferative Neoplasms. *Am J Clin Pathol.* 2011; 135(5):709-19.

Glazyrin A, Douglas-Nikitin V, **Huang J**, Micale M. Transformation of double-hit large B-cell lymphoma into B-lymphoblastic lymphoma: a case report. *J of Hematopathol* 2011; 4:199– 205.

**Huang J**, Folbe M, Richard S, Kolins M. Chronic lymphocytic leukemia with nuclear budding. *Eur J Haematol.* 2012; 88(1):92.

Al-Tahou K, Jamil S, Mody R, Knaus A, Micale M, **Huang J.** Secondary acute myelogenous leukemia (AML) with trisomy 10 and del(9q) following precursor B-cell acute lymphoblastic leukemia (ALL) with a hyperdiploid karyotype. *Cancer Genet.* 2012;205(10):533-6.

Muslimani A, Chisti, MM, Margolis J, Nadeau L, Ye H, Micale M, **Huang J**, Jaiyesimi I. Pulmonary Infiltrates in Acute Myeloid Leukemia During Induction Treatment: How Much Do We Know? *Am J Clin Oncol.* 2014;37(4):377-83.

Cotrell A, Sayedian F, Huang M, Chen X, Xie M, Smith M and **Huang J.** Flow Cytometric Analysis of Cell Size in B-Cell Non-Hodgkin Lymphoma: Reliability and Potential Diagnostic Significance. *Int J Pathol Clin Res* 2015, 1:1-6.

David J and **Huang J.** Diagnostic Utility of Flow Cytometry Analysis of Reactive T-cells in Nodular Lymphocyte-Predominant Hodgkin Lymphoma. *Am J Clin Pathol* 2016;145:107- 115.

**Note:** David J (medical student) received a competitive scholarship award on this project from Oakland University William Beaumont School of Medicine.

Tagami T, Alhalabi O, Ward N; **Huang J.** Paraneoplastic Dermatosis in a Patient with Anaplastic Large Cell Lymphoma: Case Report and Literature Review. *Dermatopathology,* 2016;3:39-43.

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Ogunleye F, Huang J, Ibrahim M, Allen E, Brennan N, Yu Z, Huben M, Jaiyesimi I. Reply to S.E. Langabeer. *J Oncol Pract.* 2017;13(4):285-286.

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Edupuganti S, Xie C, **Huang J**, Chen X, Wey E, Xie M. Clinicopathological Features of Primary Bone Marrow Mature T and NK Cell Neoplasms. *JJ Cancer Sci Res.* 2016, 2(7): 046.

Yu Z, Ogunleye F, Blankenship LM, Ward N, Ezekwudo DE, Stender M, Gaikazian SS, **Huang JZ** and Jaiyesimi I. Plasma Cell Leukemia Presenting with Spontaneous Tumor Lysis Syndrome: Report of a Rare Case and Literature Review. *Ann of Hematol & Oncol* 2016 3(12), ID1125.

Yu Z, Pang Y, Wang L, Ezekwudo DE, Ogunleye F, Gaikazian SS, Micale M, **Huang J**, Blenc AM, Jaiyesimi I. Unusual Presentation of a Small-Cell Variant of Anaplastic Large- Cell Lymphoma Case: When a Septic Picture Is Not Sepsis. *Case Rep Hematol.* 2017; ID7292148.

Micale MA, Powers S, Embrey B, Williams J, Burroughs M, **Huang J**. Significant cytogenomic evolution identified by SNP chromosome microarray analysis accompanies plasmablastic transformation of a hyperdiploid plasma cell myeloma. *J Hematopathol* 2017; 10: 133.

Ward N, Baqai J, Zehnpfennig A, Fine N, **Huang J**, and Smith MD. Bcl-2 Maturation Pattern in T-Cells Distinguishes Thymic Neoplasm/Hyperplasia, T-Lymphoblastic Lymphoma, and Reactive Lymph Nodes, Cytometry Part B (Clinical Cytometry) 2018;94(3):444-450.

Gupta A, Gabbard A, Smith, MD, Micale M, Boyanton, BL and **Huang J**. Biclonal splenic marginal zone lymphoma with T cell-rich background and aggressive transformation to large cell lymphoma. *J Hematopathol* (2019) 12: 91. <https://doi.org/10.1007/s12308-019-00351-1>.

## Reviews

**Huang Z**, and Wu J. Herpesvirus infection and expression of IgG Fc receptor. *Rev of Microbiol* 1989; 10:54-57.

Sullivan DA, **Huang Z**, Lambert RW, Wickham LA, Ono M, Pena JDO, and Gao J. Androgen regulation of ocular mucosal- and auto-immunity. In: Szlenyi J, Berczi I, eds. *Advances in Psychoneuroimmunology*. New York: Plenum Press, 1994; 213-222.

Muslimani A, Chisti, MM, Wills S, Nadeau L, Zakalik D, Daw H, **Huang J**, Jaiyesimi I. How We Treat Tumor Lysis Syndrome. *Oncology* 2011; 25 (4).

## Books

Zhu M and **Huang JZ** eds. Differential diagnosis between benign and malignant lymphoproliferative lesions. Guangdong Science and Technology Press, 2012.

Tai W and **Huang JZ** eds. Choose wisely: laboratory tests for hematologic neoplasms. People's medical publishing house, July, 2020.

## Chapters

**Huang JZ**, Parks S, and Press R. Molecular Diagnostic Pathology. In: Cheng L, Bostwick DG, eds, Essentials of Anatomic Pathology. 2<sup>nd</sup> ed. Human Press, 2005, pp.3-33.

**Huang JZ**, and Press R. Molecular Diagnostic Pathology. In: Cheng L, Bostwick DG, eds, Essentials of Anatomic Pathology. 3<sup>rd</sup> ed. Springer, 2011, pp. 489-513.

**Huang JZ**, Pan J, Chen Y, Chen H and Fan Y. Application of flow cytometry, cytogenetic and molecular techniques in the differential diagnosis of reactive lymphoid hyperplasia and lymphoma. In: Zhu M and Huang JZ eds. Differential diagnosis between benign and malignant lymphoproliferative lesions. Guangdong Science and Technology Press, 2012, pp. 25-38.

**Huang JZ**. Diagnostic reasoning and quality control in pathology evaluation of lymphoproliferative lesions. In Zhu M and Huang JZ eds. Differential diagnosis between benign and malignant lymphoproliferative lesions. Guangdong Science and Technology Press, 2012, pp. 47-51.

**Huang JZ**. A case study of periesophageal low grade follicular lymphoma. In Zhu M and Huang JZ eds. Differential diagnosis between benign and malignant lymphoproliferative lesions. Guangdong Science and Technology Press, 2012, pp.72-73.

**Huang JZ**. A case study of partial nodal involvement by follicular lymphoma. In Zhu M and Huang JZ eds. Differential diagnosis between benign and malignant lymphoproliferative lesions. Guangdong Science and Technology Press, 2012, pp.74-76.

**Huang JZ**. A case study of plural effusion with mantle cell lymphoma. In Zhu M and Huang JZ eds. Differential diagnosis between benign and malignant lymphoproliferative lesions. Guangdong Science and Technology Press, 2012, pp.82-83.

**Huang JZ**. A case study of nodal precursor T-lymphoblastic lymphoma with vena cava syndrome. In Zhu M and Huang JZ eds. Differential diagnosis between benign and malignant lymphoproliferative lesions. Guangdong Science and Technology Press, 2012, pp.82-82.

**Huang JZ**. A case study of periaortic nodal marginal zone lymphoma. In Zhu M and Huang JZ eds. Differential diagnosis between benign and malignant lymphoproliferative lesions. Guangdong Science and Technology Press, 2012, pp.232-234.

**Huang JZ**. A case study of breast marginal zone lymphoma. In Zhu M and Huang JZ eds. Differential diagnosis between benign and malignant lymphoproliferative lesions. Guangdong Science and Technology Press, 2012, pp. 237-238.

**Huang JZ**. A case study of soft tissue with aggressive large granular lymphocytic leukemia. In Zhu M and Huang JZ eds. Differential diagnosis between benign and malignant lymphoproliferative lesions. Guangdong Science and Technology Press, 2012, pp. 277-279.

**Huang JZ**, Chen N and Press R. Molecular Diagnostic Pathology. In: Cheng, L, Bostwick, DG, eds. Essentials of Anatomic Pathology. 4<sup>th</sup> ed. Springer, 2016, pp. 529-555.

Tai W and **Huang JZ**. BCR-ABL1 positive chronic myeloid leukemia. In: Tai W and **Huang JZ** eds. Choose wisely: laboratory tests for hematologic neoplasms. 1st ed. People's medical publishing house, 2020, pp. 7-11

**Huang JZ** and Tai W. Neutrophilia. In: Tai W and **Huang JZ** eds. Choose wisely: laboratory tests for hematologic neoplasms. 1st ed. People's medical publishing house, 2020, pp. 169-172.

### Conference Presentations/Abstracts

Lee J, **Huang JZ**, Abbas V and Hayward A. Construction of a truncated varicella-zoster glycoprotein IV gene in a vaccinia virus expression vector. *Clinical Research* 1991; 39:59A.

Ono M, **Huang JZ**, Wickham LA, Gao J, and Sullivan DA. Analysis of androgen receptors and cytokines in lacrimal glands of a mouse model of Sjögren's syndrome. *Invest Ophthalmol Vis Sci Suppl* 1994; 35:1793.

**Huang JZ**, Gao J, Wickham LA and Sullivan DA. The influence of gender and sex hormone on TGF-beta mRNA expression in rat lacrimal gland. *Invest Ophthalmol Vis Sci Suppl* 1995; 35:S991.

Griener T, **Huang JZ**, Demidovich J, Chan WC. BCL-6 mutation in post-transplant lymphoproliferative disorders may not predict survival. Presented at United States and Canadian Academy of Pathology 2000, *Lab Invest* 2000; 80(1):149A.

**Huang JZ**, Chan WC, Griener TC, Bast, MA, Lynch, JC, Armitage, JO and Weisenburger, DD. Diffuse large B-cell lymphoma (DLBCL) arising in lymphocyte predominance Hodgkin's disease (LPHD). Presented at United States and Canadian Academy of Pathology 2000, *Lab Invest* 2000; 80(1):150A.

**Huang JZ**, Griener TC, Lynch JC, Staudt LM, Weisenburger DD, Armitage JO, and Chan WC. Gene expression profile associated with T-cell infiltration in diffuse large B-cell lymphoma analyzed by cDNA microarray. Presented at United States and Canadian Academy of Pathology 2001, *Lab Invest* 2001; 81(1):167A.

**Huang JZ**, Sanger WG, Pickering D, Griener TC, Staudt LM, Lynch JC, Weisenburger DD, Armitage JO, and Chan WC. CD10, Bcl-2, and Bcl-6 protein expression and t(14;18)(q32;q21) in two subsets of diffuse large B-cell lymphoma defined by gene expression profiles. Presented at United States and Canadian Academy of Pathology 2001, *Lab Invest* 2001; 81(1):167A.

**Huang JZ**, Greiner TC, Weisenburger DD, Braziel RB and Chan WC. Analysis of immunoglobulin light chain gene expression in B-cell lymphomas by cDNA microarray. Presented at United States and Canadian Academy of Pathology 2002, *Lab Invest* 2002; 82(1):244A.

**Huang JZ**, Hook R, Fan F, Gatter K, Rodgers W and Braziel R. Microarray gene expression data can be efficiently managed and mined with Microsoft Access and Excel. Presented at United States and Canadian Academy of Pathology 2003, *Lab Invest* 2003; 83(1): 323A.

Fan G, Molstad M, **Huang JZ**, Braziel R, Rodgers W, Nagalla R: Protein profiling of follicular lymphoma and Burkitt's lymphoma using SELDI protein-chip technology. Presented at ASH 45<sup>th</sup> Annual Meeting, 2003.

**Huang JZ**, Fan G, Zhong Y, Gatter K, Braziel R, Gross G, and Bakke AC. Diagnostic utility of aberrant CD22 expression in differentiating neoplastic cells of small B-cell lymphoproliferative disorders from admixed benign B-cells in four-color multi-parameter flow cytometry. Presented at United States and Canadian Academy of Pathology 2004 annual meeting, *Modern Pathology* 2004; Vol. 17 (1):P251A.

Molstad M, Nagalla S, Braziel R, **Huang JZ**, Rodgers W, Gross G, and Fan G. Identification of proteins involved in the transformation of follicular lymphoma. Presented at USCAP 2004 Annual Meeting.

Bakke AC, Purtzer Z and **Huang JZ**. Parallel evaluation of commercial antibodies for ZAP- 70 in Chronic Lymphocytic Leukemia. Presented at platform at 4<sup>th</sup> Euroconference on Flow and Beyond Cytometry: from pathogenesis to therapy, from clinical research to environmental biology, 2004.

**Huang JZ**, Carter K, Zhong Y, and BakkeA. Assessment of CD52 Status by Flow Cytometry Is Futile Practice Prior to Initiation of CAMPATH-1H Treatment for Chronic Lymphocytic Leukemia. Presented as a poster at 2004 Clinical Cytometry Society Annual Meeting.

Zhong Y, BakkeA and **Huang JZ**. Fludarabine Resistance in Chronic Lymphocytic Leukemia Detected by A Novel In-Vitro Multi-Parameter Flow Cytometric Cytotoxicity Assay. Presented at the platform at 2004 Clinical Cytometry Society Annual Meeting.

Smith P, **Huang JZ**, Gatter K, Braziel R, and **Fan G**. CD43 is a sensitive marker for screening Hematologic malignancy. American Society of Clinical Pathology 2005 Annual Meeting.

Fan G, Zhong Y, Smith C, **Huang JZ**, and Braziel R. A Proteomic Approach to Discovery of Candidate Proteins Involved in the Transformation of Follicular Lymphoma. ASH 47<sup>th</sup> Annual Meeting, 2005.

Zhong Y, **Huang JZ**, and Fan F. Candidate Proteins Involved in the Transformation of Follicular Lymphoma by Proteomics Approach. Presented as a poster at AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics, 2005.

Li K, Mei N, Fan G, **Huang J**. Can flow cytometric differential replace morphological differential in blast enumeration in the diagnosis and classification of acute leukemia? Presented as a poster at 2008 Annual Conference of Clinical Cytometry Society.

Galderisi F, Stork L, Li J, Mori M, Mongoue-Tchokote S, and **Huang J**. Flow cytometry chemosensitivity assay as a predictive tool for early response in acute lymphoblastic leukemia. Presented as a poster at 2008 Annual Conference of Clinical Cytometry Society.

G Fan, **Huang J**, Braziel R, Li J and Chen CJ. New Flow cytometry markers for distinguishing acute myeloid leukemia, acute myelomonocytic leukemia and acute monoblastic / monocytic leukemia. Presented at the platform at 2009 United States and Canadian Academy of Pathology Annual Meeting, Mod Pathol, 2009; 22(S1):262A.

Chen C, Braziel R, **Huang J** and G Fan. A flow cytometric protocol for differential diagnosis of acute monocytic leukemia, chronic myelomonocytic leukemia and reactive moncytosis. Presented as a poster at 2009 United States and Canadian Academy of Pathology Annual Meeting, Mod Pathol, 2009; 22(S1):258A.

JN Punia, T Fenneli, V Douglas-Nikitin, **JZ Huang** and MD Smith. Identification of megakaryocytes by flow cytometry: Immunophenotypic expression in reactive states and hematopoietic malignancies. Abstract# 1416, Presented as a poster at United States and Canadian Academy of Pathology 2010 Annual Meeting, Washington DC. Mod Pathol, 2010; 23(S1):317A.

F Sayedian, V Douglas-Nikitin, M Smith, AM Blenc, G Fan, **JZ Huang**. Abnormalities of Immunoglobulin Light Chain Protein Expression in Mature B-Cell Lymphomas / Leukemias Abstract# 1431, Presented as a poster at United States and Canadian Academy of Pathology 2010 Annual Meeting, Washington DC. Mod Pathol, 2010; 23(S1):320A.

Farzaneh H Sayedian, AlirezaTorabi, Marc Smith, Ann Marie Blenc, Xia Chen, Ming Xi, Vonda Douglas-Nikitin and **James Huang**. Grading follicular lymphoma using flow cytometry, Cytometry Part B: Clinical Cytometry November 2010; 78B(6): 392. Presented as a poster at International Clinical Cytometry Society 25th Annual Clinical Cytometry Meeting, Houston TX, October 3-5, 2010.

Ming Xie, Xia Chen, Adil Akhtar, **James Huang**, Bobby L. Boyanton Jr. and Mark Micale. Concurrent Loss of CD34 and CD10 with Diminished TdT Expression in Relapsed Adult Precursor B Lymphoblastic Leukemia Bringing Significant Challenge in the Evaluation of Minimal Residual Disease: A Case Study with Literature Review. Presented as a poster at ASCP Annual Meeting, San Francisco CA, October 29, 2010.

Alaa Muslimani, Sani Kizilbash, Ishmael Jaiyesimi, Laura Nadeau, Dana Zakalik, Jeffery Margolis, and **James Huang**. Evaluation of the Diagnostic Utility of Cerebral Spinal Fluid (CSF) Flow Cytometry (FC) In Detection of Central Nervous System (CNS) Involvement by Hematological Malignancy. Blood (ASH Annual Meeting Abstracts), 2010; 116: 3837. Presented as a poster at 52nd ASH Annual Meeting, Orlando, December 4-7, 2010.

AlirezaTorabi, **James Huang**, Vonda Douglas-Nikitin, and Marc Smith. Azacitidine Treatment of MDS/AML: Effect on Immunophenotyping by Flow Cytometry and Associated Cytogenetic Findings. Presented as a poster at United States and Canadian Academy of Pathology 2011 Annual Meeting, San Antonio TX, February 26-March 4, 2011.

Michelle Huang, Farzaneh Sayedian, Aaron Cotrell, Thomas Fennell, Alaa Muslimani, Xia Chen, Marc Smith, and **James Huang**. Flow cytometric analysis of lymphoma cell size of diffuse large B-cell lymphoma. Presented as a poster at 26th Annual Clinical Cytometry Meeting, Portland OR, USA October 14-18, 2011.

Alaa Muslimani, Mohammad M Chisti, Jeffery Margolis, Laura Nadeau, Hong Ye, and **James Huang**, Ishmael Jaiyesimi. Pulmonary Infiltrates (PI) in Acute Myeloid Leukemia (AML) During Induction Treatment (IT). How Much Do We Know? Presented as a poster at The American Society of Hematology Annual Meeting, December 10-13, 2011. San Diego CA.

Alaa Muslimani, Aya Rifai, Mohammad M Chisti, Kinda Muslemani, Ayham Ashkar, Jeffery Margolis, Laura Nadeau, Hong Ye, **James Huang**, and Ishmael Jaiyesimi. Venous Thrombotic Events (VTEs) in Acute Myeloid Leukemia (AML) Patients During Induction Therapy (IT): Identifying Risk Factors, and Safety of Using Anticoagulation Therapy. Presented as a poster at The American Society of Hematology Annual Meeting, December 10-13, 2011. San Diego CA.

Aaron Cotrell, Farzaneh Sayedian, Michelle Huang, Marc Smith, **James Huang**. Development and validation of a flow cytometry protocol for measuring tumor cell size of B- cell Non-Hodgkin lymphomas. Presented as a poster at United States and Canadian Academy of Pathology 2012 Annual Meeting, Vancouver, BC, March 17-23, 2012.

Alaa Muslimani, Aya Rifai, Mohammad Muhsin Chisti, Jeffery Margolis, Laura Nadeau, Ishmael Jaiyesimi and **James Huang**. Late Clearance of Circulating Leukemic Blasts (CBs) During Induction Therapy (IT) Is a predictive of Refractory Adult Acute Myeloid Leukemia (AML). Blood (ASH Annual Meeting Abstracts), November 2012; 120: 4319.

Mohammad Muhsin Chisti, Govinda R. Brahmanday, Alaa A Muslimani, Siddhartha Yadav, Paul Rigo, Ching-ye Oliver Wong, Ishmael Jaiyesimi, and **James Huang**. Risk Stratification of Follicular Lymphomas Using Two Independent Prognostic Factors: Lymphoma Cell Size Assessment by Flow Cytometry and FDG PET Based Metabolic Activity. Blood (ASH Annual Meeting Abstracts), November 2012; 120: 5098.

Junaid Baqai, Marc Smith, **James Huang**. Bcl-2 Maturation Pattern in T-Cells Distinguishes Thymic Neoplasm / Hyperplasia, T-Lymphoblastic Lymphoma and Reactive Lymph Nodes. Presented as a poster at United States and Canadian Academy of Pathology 2013 Annual Meeting, Baltimore MD, March 2-8, 2013.

Yingchun Wang, Marc Smith and **James Huang**. Immunophenotypic Features and Quantitative Variations of Cellular Fragments in Diffuse Large B-Cell Lymphomas analyzed by Flow Cytometry. Presented as a poster at The College of American Pathologists (CAP) 2013 Annual Meeting, Orlando, October 13-16, 2013. Also presented at Beaumont Health System Residents' and Fellows' Research Forum, May 30, 2014. Awarded with 2nd Place for residents' poster presentations.

Kathleen E. Doyle, **James Huang**, Soto. Using technology for Content, Engagement, Projects and Research, Presented as a poster in OUWB 3th annual William Davidson Medical Education Week, May 19-21, 2014.

James David and **James Huang**. Diagnostic Utility of Flow Cytometry Analysis of Reactive T-Cells in Nodular Lymphocyte-Predominant Hodgkin Lymphoma. Presented as a poster at United States and Canadian Academy of Pathology 2014 Annual Meeting, San Diego, March 1-8, 2014.

Caitlin Schein and **James Huang**. The Clinical Significance of Quantitative Analysis of Neoplastic B-Cells of Follicular Lymphoma with Flow Cytometry. Presented as a poster at Beaumont Health System Residents' and Fellows' Research Forum, May 30, 2014; also presented to 2014 CAP Annual Meeting.

Xia Chen, **James Huang**, Ming Xie, Elizabeth Wey and Mark Micale. Acute Myeloid Leukemia (AML) with mutated NPM1 with morphological and immunophenotypic features mimicking acute promyelocytic leukemia, Presented to 2014 CAP annual meeting.

Ming Xie, **James Huang**, Xia Chen, Elizabeth Wey and Mark Micale. Triple-Hit Expression of MYC, Bcl2 and Bcl6 in a Primary Bone Marrow Large B Cell Lymphoma, Presented as a poster at 2014 ASCP Annual Meeting.

**James Huang**, Michelle. Young, Lynda Misra, and Rachel VanHulle. Putting the Pieces Together: A Curriculum Designed to Integrate the Imaging and Laboratory Findings of a Symptomatic Patient. Presented as a poster at AAMC CGSA/CGEA Joint Regional Meeting, Columbus OH, April 9-12, 2015.

**James Huang**. Assessment of 4th Year Medical Student's Competency in Diagnostic Workup for Anemia and Lymphadenopathy Prior to Diagnostic Medicine Clerkship. Presented as a poster in OUWB 4th annual William Davidson Medical Education Week, Birmingham MI, May 18-20, 2015.

**James Huang**. Mandatory Pathology Rotation within Diagnostic Medicine Clerkship for All Medical Students: William Beaumont School of Medicine's Experience, Association of Pathology Chairs 2015 Annual Meeting, San Diego, CA, July 14-17, 2015.

Foluso Ogunleye, **James Huang**, Ibrahim Mohammed, Emily Allen, Neil Brennan, Ishmael Jaiyesimi. TX, Diagnostic Significance of Screening for BCR-ABL1 by PCR in Patients with Neutrophilia. The William Beaumont Hospital experience, Presented as a poster at Society of Hematologic Oncology 2015 Annual Meeting, Houston, September 16-19, 2015. Clinical Lymphoma Myeloma and Leukemia. 2015; 15, S2:S33. Proceedings of the Society of Hematologic Oncology 2015 Annual Meeting.

Rohit Singh, Charity Chen, Mark Micale. **James Huang**, Marc D. Smith. Plasma Cell Myeloma: Impact of Bone Marrow Erythropoiesis on Prognostic Markers. Presented as a poster at CAP annual meeting, Las Vegas NV, 2016.

Rohit I. Singh, Amy Gabbard, Mark Micale, **James Huang**, Marc D. Smith. Concurrent Bone Marrow Involvement by Plasma Cell Myeloma and Mantle Cell Lymphoma: A Rare Finding. Presented as a poster at CAP annual meeting, Las Vegas NV, 2016.

Amy Gabbard, Rohit I. Singh, Mazen Toushan, Bobby Boyantan, Marc D. Smith. **James Huang:** Biclonal Splenic Marginal Zone Lymphoma, T-cell Rich Variant. Presented as a poster at CAP annual meeting, Las Vegas NV, 2016.

Kristle Haberichter, Sara Huang, and **James Huang.** Flow cytometry analysis of recurrent or persistent lymphadenopathy in patients with nodular lymphocyte predominant Hodgkin lymphoma. Presented as a poster at 31<sup>st</sup> International Clinical Cytometry Meeting, Bonita Springs FL, 2016.

**James Huang.** A New Active Learning Activity in Pathology Rotation of Diagnostic Medicine Clerkship: Complete a Death Certificate and Present at Diagnostic Morbidity and Mortality Conference, Presented as a poster at Association of Pathology Chairs Annual Meeting, San Diego CA, July 12-15, 2016.

Jatin Rana and **James Huang.** A pilot project of developing an Objective Structured Clinical Examination (OSCE) on anemia workup utilizing virtual cases for 4th year medical students during diagnostic medicine clerkship. Presented as a poster in OUWB 5th annual William Davidson Medical Education Week, May 16-20, 2016.

Woodlyne Roquiz and **James Huang.** Rapid Diagnosis of Aggressive Mature BNHL Based on Graphic Presentation and Statistic Descriptions of FSC Parameters by Flow Cytometry. Presented as a poster at USCAP annual meeting, San Antonio, March 4-10, 2017.

Alia Gupta, Marc Smith and **James Huang.** Identification of aggressive variants of mantle cell lymphoma based on flow cytometry. Presented as a poster at USCAP Annual Meeting, Vancouver, March, 2018.

Janice Zhao, Rachel VanHulle, Lynda Misra, Cory Rasmussen, **James Huang.** Outcome Assessment of OUWB Diagnostic Medicine Clerkship. Presented as a poster in OUWB 7th annual William Davidson Medical Education Week, May 14 – 18, 2018.

**James Huang,** Britany Rayborn, Kurt Bernacki, and Michelle Young. Introducing Laboratory Medicine to Medical Students before They Enter Clinical Clerkship: Oakland University William Beaumont School of Medicine's Experience. Association of Pathology Chairs 2018 Annual Meeting, San Diego CA, July 15-19, 2018.

**James Huang.** Teaching Medical Students Choosing Wisely in Diagnostic Medicine Clerkship: Oakland University William Beaumont School of Medicine's Experience. Association of Pathology Chairs 2018 Annual Meeting, San Diego CA, July 15-19, 2018.

Savannah D. Gisreil, Kristle Haberichter, Sara Huang, **James Huang.** Utility of flow cytometry in the diagnostic evaluation of recurrent or persistent nodular lymphocyte- predominant Hodgkin Lymphoma. American Society for Clinical Pathology (ASCP) 2019 Annual Meeting. Phoenix AZ, Sepember 11 – 13, 2019.

Christopher Allen Willner, Mohammad Muhsin Chisti, Michaela Soriano, James Huang. Analyzing How Elderly Acute Myeloid Leukemia Patients Are Treated, an Institutional Experience. 61st ASH Annual Meeting. Orlando FL, December 7-10, 2019. Blood (2019) 134 (Supplement\_1): 5849. <https://doi.org/10.1182/blood-2019-121560>.

## Online Teaching Modules

1. Hematology laboratory tutorial on lymphoma for hematology course, Oakland University William School of Medicine: <https://www.softchalkcloud.com/lesson/serve/WkiRF3xIpSAjnX/html>
2. Anemia workup in M4 diagnostic medicine clerkship, Oakland University William School of Medicine <https://www.softchalkcloud.com/lesson/serve/6zmhK9NPA743EV/html>
3. Lymphoma workup in M4 diagnostic medicine clerkship: Oakland University William School of Medicine <https://www.softchalkcloud.com/lesson/serve/hayDu9AqcMLdml/html>
4. Hematopathology in-service pre-test on myeloid neoplasia for pathology residents/fellows <https://www.softchalkcloud.com/lesson/serve/mchJ6nj0pISMdC/html>

## VISITING PROFESSORSHIPS / LECTURESHIPS

### International lectures

2006 Diagnostic pathology of lymphoma. Annual Conference of the Pathology Division of Guangdong Medical Association of China.

2007 Advanced hematopathology workshop (course director and lecturer), KingMed Medical Center, China.

2008 Advanced hematopathology workshop (course director and lecturer), KingMed Medical Center, China.

2008 Application of flow cytometry, PCR and FISH in lymphoma diagnosis, Department of Pathology, Cancer Institute and Cancer Hospital, Peking Union Medical College and Chinese Academy of Medical Sciences, Beijing, China.

2010 Modern personalized hematopathology service. The third leukemia conference and forum on hematolymphoid tumors, SunYat-sen University Cancer Center, Guangzhou, China.

2012 My approach to classy lymphoma. The Second Hospital of Central South University Xiangya School of Medicine, Changsha, Hunan, China.

2013 Neoplastic hematopathology update. Nanyang Central Hospital, Henan, China 2013. The art and practice in lymphoma pathology. KingMed Medical Center, Guangzhou, China.

2013 Choose wisely in lymphoma workup. Xiangya Hospital of Central South University Xiangya School of Medicine, Changsha, China.

2014 Algorithm for Initial Work-up of Acute Leukemia. The Second Xiangya Hospital of Central South University, Changsha, China.

2015 Practical approach of flow cytometry analysis of lymphoma. KingMed Medical Center, Guangzhou, China.

2017	Rapid diagnosis and accurate classification of hematological malignancy.
2017	China-US summit on pathology, Guangzhou, China.
2017	Rapid diagnosis and accurate classification of hematological malignancy.
2017	China-US summit on pathology, Xian, China.
2017	Choose laboratory tests wisely for hematologic neoplasms. Peking University People's Hospital, Beijing, China.
2017	Choose laboratory tests wisely for hematologic neoplasms. Tianjin University of Traditional Chinese Medicine, Tianjin, China.
2018	Traps and tricks in diagnosis of primary GI lymphoma, Sino-US pathology summit, Nanjing, China.
2018	Choose laboratory tests wisely for hematologic neoplasms. Hunan Provincial People's Hospital, Changsha, China.
2019	Choose laboratory tests wisely for hematologic neoplasms. Hunan Cancer Hospital, Changsha, China.
2019	Hematolymphoid tumor board. Hunan Provincial People's Hospital, Changsha, China
2019	Choose laboratory tests wisely for hematologic neoplasms. Xian Yang Central Hospital, China.
2019	Choose laboratory tests wisely for hematologic neoplasms. The second Affiliated Hospital of Xi'an Jiaotong University, China.

### National lectures

2006	Drug resistance in CLL (lecturer), Hematopathology session (Moderator). The Second Investigative Pathology Symposium, Chinese American Pathologist Association, Cleveland OH.
2008	Virtual flow cytometry and hot topics in hematopathology. The Fourth Investigative Pathology Symposium, Chinese American Pathologist Association, Denver CO.
2018	Workshop on developing and implementing a laboratory medicine curriculum in the clinical years, Annual GRIPE Winter Meeting, Las Vegas NV.
2018	Introduce laboratory medicine and teach choose wisely, Association of Pathology chairs annual meeting, San Diego CA.

### Regional lectures

2004	Laboratory evaluation of myelodysplasia and myeloid proliferation. Spring Seminar, Washington State Society for Clinical Laboratory Science and Northwest Society of American Medical Technologists, Vancouver WA.
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2005 Clinical flow cytometry update. Portland Area Laboratory Consortium for Education (PALCOE), Portland OR.

2006 Detection of residual disease by flow cytometry (lecturer) and course clinical flow cytometry data analysis workshop (course director), Cascade Cytometry User Group/Northwest Cytometry User Group Meeting, Portland OR.

2015 Flow cytometry of lymphoma: correlation with immunohistochemistry. The first Beaumont Pathology Seminar, Current issues in Hematopathology, Troy MI.

### **Institutional lectures**

2008 Hematopathology service for personalized Medicine, University of Colorado Health Science Center, Department of Pathology, Denver CO.

2013 Pathology Faculty Educational Retreat, Beaumont Health System and Oakland University William Beaumont (OUWB) School of Medicine: "Softchalk" - Using Interactive Presentation Software.

### **TEACHING**

#### **Courses taught at OUWB**

2013 Hematology course: White blood cell development and function

2013 – 2015 Hematology course: Lymphoma laboratory

2014 – 2019 Diagnostic Medicine Clerkship: Orientation

2014 – 2019 Diagnostic Medicine Clerkship: Anemia and lymphadenopathy session

2016 – 2019 Clinical Pathology Elective: Orientation

2016 – 2019 Clinical Pathology Elective: Hematopathology session

#### **Grand Round Lectures**

2002 Hypothesis generation with microarray, Pathology Department, Oregon Health & Science University, Portland OR.

2004 Gene expression profiling of hematopoietic malignancy, Pathology Department, Oregon Health & Science University, Portland OR.

2006 Personalized in vitro drug sensitivity profiling for CLL, Pathology Department, Oregon Health & Science University, Portland OR.

2007 In vitro drug sensitivity profiling for acute leukemia, Pathology Department, Oregon Health & Science University, Portland OR.

2008 Minimal residual disease detection in acute myeloid leukemia, Hematology/Oncology Department, Oregon Health & Science University, Portland OR.

**Didactic lectures for residents/fellows**

2002 – 2007	Department of Pathology, Oregon Health & Science University Aggressive B-cell malignancy (1 hr., biennial).
2002 – 2007	Flow cytometric analysis of acute leukemia (1 hr., biennial).
2002 – 2007	Flow cytometric analysis of lymphoma and plasma cell neoplasm (1 hr., biennial).
2002 – 2007	Idiopathic thrombocytopenic purpura, thrombotic thrombocytopenic purpura, hemolytic-uremic syndrome, and autoimmune hemolysis (1 hr., biennial).
2002 – 2007	Myelodysplastic syndrome/myeloproliferative disorder (1 hr., biennial).
2009 – present	Department of Clinical Pathology, Beaumont Health Hematopoiesis (1 hr., biennial).
2009 – present	Reactive lymphocytosis and lymphadenopathy (1 hr., biennial).
2009 – present	Myeloid proliferative neoplasm (1 hr., biennial).
2009 – present	Myeloid proliferative neoplasm/myelodysplastic syndrome B-cell Non-Hodgkin lymphoma (1 hr., biennial).
2009 – present	T-cell Non-Hodgkin lymphoma (1 hr., biennial)
2009 – present	Hemolytic anemia (1 hr., biennial).
2009 – present	Red cell membrane disorders (1 hr., biennial).

**Clinical rotations**

2001 – 2008	Teach pathology residents, transitional year interns, hematopathology fellows, hematology fellow and elective medical students at daily hematopathology signing out (hematology, hematopathology, coagulation, flow cytometry).
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**Research mentoring**

2003 – 2005	Yanping Zhong, M.D., Cancer Hospital, Guangxi Medical University Award from Clinical Flow Cytometry Society. Currently associate professor at Guangxi Medical University.
2006 – 2008	Faith Galderisi, D.O., St. Baldrick's Foundation Fellowship recipient, Pediatric hematology and oncology fellow, OHSU, Currently a pediatric hematologist in Children's Hospital at Legacy Emanuel, Portland OR.
2006 – 2007	Zoulin Song, M.D., Xilin Hospital of Nan Shan District, Shenzhen Guangdong, China. Currently president of Xilin Hospital of Nan Shan District, China.
2007	Saturday Academy Apprenticeships in Science and Engineering (ASE) Karen Li, Lake Oswego High School student.
2007	Nicholas Mei, Lake Oswego High School student
2009 – 2011	Farzaneh Sayedian, M.D., Beaumont Hospital pathology resident

2009 – 2012	Alaa Muslimani, M.D., and Govinda Brahmanday, M.D., Beaumont Hospital hematology / oncology fellows
2009 – 2013	Mohammad Muhsin Chisti, M.D., Beaumont Hospital hematology/oncology fellow
2011 – 2012	Aaron Cotrell, M.D., Beaumont Hospital hematopathology fellow
2011 – 2012	Thomas Fennell, M.D., Beaumont Hospital hematopathology fellow
2012 – 2013	Junaid Baqai, M.D., Beaumont Hospital hematopathology fellow
2013 – 2016	James David, M.D. candidate, Oakland University William Beaumont School of Medicine, Capstone Project
2013 – 2014	Caitlin Schein, M.D., Beaumont Hospital hematopathology fellow
2013 – 2014	Yingchun Wang, M.D., Beaumont Hospital pathology resident
2015 – 2017	Woodlyne Roquiz, M.D., Beaumont Hospital Hematopathology fellow
2015 – 2018	Yu Zhou, M.D., Ph.D. Beaumont Hospital hematology/oncology fellow
2016 – 2018	Kristle Haberichter, D.O., Beaumont Hospital pathology resident and hematopathology fellow
2016 – 2019	Janice Zhao, M.D. candidate, Oakland University William Beaumont School of Medicine, Embark Project
2017 – 2020	Michaela Soriano, M.D. candidate, Oakland University William Beaumont School of Medicine, Embark Project
2017 – 2020	Alia Gupta, M.D., Beaumont Hospital pathology resident
2018 – present	Michelle Wu, M.D. candidate, Oakland University William Beaumont School of Medicine, Embark Project
2018 – present	Patricia Ruslin, M.D. candidate, Oakland University William Beaumont School of Medicine, Embark Project
2018 – present	Alan Nguyen, M.D. candidate, Oakland University William Beaumont School of Medicine, Embark Project

### Other teaching activities

2005	Oregon Graduate Institute of Oregon Graduate Institute of Science & Technology, Management in Science & Technology graduate students, Nikki Walter and Pam Blevins: Developing a commercialization proposal.
2005	Oregon Graduate Institute of Oregon Graduate Institute of Science & Technology, Management in Science & Technology graduate students, Rob Morrow, Janet Peterson, Gary Schultz, Jason Yoder, and Stephen Pisenti: Developing a business plan.

2007 Portland State University School of Business Administration graduate students, Humayun Malik, Yulia Smirnova, Peter Klouda and James Turney: Developing a commercialization proposal.

## Research & Grant

2002	Analysis of proto-oncogene activation and abnormalities of signal transduction pathways for identification of potential prognostic markers and therapeutic targets in follicular lymphoma. \$78,200 from Southwest Oncology Group, Principal investigator
2003 – 2004	Gene expression monitoring by gene chip microarray in patients with lymphoma and leukemia. \$232,451 from Gene Logic, Co-principal investigator
2006 – 2007	Drug sensitivity profiling for hematological malignancy. \$10,000 from OHSU Hospital Assay Development Fund, Principal investigator.
2008 – present	Improving the diagnosis of hematological malignancy with flow cytometry.
2014 – 2019	Development and implementation of a diagnostic medicine clerkship.

## SERVICE

## Editorial Boards

2014 – present International Journal of Pathology and Clinical Research, ClinMed International Library

2016 – present Clinics in Oncology

2016 – present Pathology, Remedy Open Access

2018 – present ASCP Choosing Wisely Advisory Board

## Manuscript review

7/2001 – present The Journal of Molecular Diagnostics, Modern Pathology, Lymphoma and Leukemia, British Journal of Cancer

## Professional

2001 – 2008	Laboratory quality control and quality assurance committee, Oregon Health & Science University
2001 – 2008	Hematopathology fellowship committee, Oregon Health & Science University
2001 – 2008	Pathology residency committee, Department of Pathology, Oregon Health & Science University
2001 – present	CAP inspection team member, flow cytometry and hematology
2006	CAP inspection team leader, Department of Pathology, Oregon Health & Science University
2006 – 2007	Medical student candidate interviewer, Oregon Health & Science University

2008 – present	Hematopathology fellowship committee, Beaumont Health
2008 – present	Laboratory quality control and quality assurance committee, Beaumont Health
2011 – present	Pathology department board member
2011 – present	Departmental tenure and promotion committee, Oakland University William Beaumont School of Medicine
2013 – 2019	OUWB curriculum committee, M3/M4 subcommittee
2013 – 2014	Medical student candidate interviewer, Oakland University William Beaumont School of Medicine
2014 – 2016	Medical student candidate screener, Oakland University William Beaumont School of Medicine
2018 – 2019	GRIPE membership committee
2018 – 2019	Question bank committee