

Mark A. Micale, Ph.D., FACMG

Associate Professor, Department of Pathology and Laboratory Medicine
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Corewell Health East System
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ADDRESS

Corewell Health William Beaumont University Hospital (East)
Research Institute, Anatomic Pathology Office, Lower Level
3601 West Thirteen Mile Road
Royal Oak, MI 48073

EDUCATION AND TRAINING

- 05/1993 – 07/1995 Clinical Fellow, Cytogenetics and Molecular Genetics
Case Western Reserve University / University Hospitals of Cleveland Center for Human Genetics, Cleveland, OH
- 08/1990 – 01/1993 Graduate Teaching Assistant II
Wayne State University School of Medicine, Detroit, MI
- 9/88-3/93 Doctor of Philosophy, Ph.D., Pathology
Wayne State University School of Medicine, Detroit, MI
- 6/84-5/88 Bachelor of Science, B.S., Microbiology with high distinction
University of Michigan, Ann Arbor, MI

PROFESSIONAL MEMBERSHIPS

- American Society of Human Genetics (ASHG)
- American College of Medical Genetics and Genomics (ACMG)
- Children’s Oncology Group (COG)
- Fellowship of the American Society of Experimental Biology (FASEB)
- Association for Molecular Pathology (ASP)
- Cancer Genetics Consortium (CGC)

PROFESSIONAL, ACADEMIC, ADMINISTRATIVE, AND CLINICAL POSITIONS

Academic Positions

- 2011 – present Master Educator, Medical Genetics and Molecular Medicine
Oakland University William Beaumont School of Medicine, Rochester, MI
- 2014 – present Course Director
Medical Genetics / Molecular Medicine M3 / M4 Medical Student Elective
Oakland University William Beaumont School of Medicine, Rochester, MI

Embark Mentor
Oakland University William Beaumont School of Medicine, Rochester, MI

Resident / Fellow Training

1995 – 2007 Medical Genetics / Genomic Medicine Course for Pathology Residents and Fellows
Medical Student Teaching at University of Toledo College of Medicine, Toledo, OH

1/2011 – present Master Educator, Medical Genetics / Molecular Medicine Course
Course Director, Medical Genetics / Molecular Medicine M3/M4 Elective
Oakland University William Beaumont School of Medicine, Rochester, MI

5/1992 – 7/1992 Adjunct Instructor, Course Director, Pathophysiology
Madonna University, Livonia, MI

Clinical Positions

6/2006 – present System Director (East), Clinical Cytogenomics Laboratory
Corewell Health William Beaumont University Hospital, Royal Oak, MI

1/2007 – 10/2007 Interim Director, Center for DNA Diagnostics
Mercy Health Partners, Mercy Integrated Laboratories, Toledo, OH

8/2003 – 1/2007 Director, Center for DNA Diagnostics
Mercy Health Partners, Mercy Integrated Laboratories, Toledo, OH

5/2001 – present Medical Staff, Department of Pathology
Corewell Health William Beaumont University Hospital, Royal Oak, MI

3/2000 – 8/2003 Director, Clinical Molecular Genetics Laboratory
Services included medical genetic diagnostics, DNA paternity testing, and DNA forensic identity testing

9/1995 – present Director, Clinical Cytogenetics Laboratory, Clinical Associate Professor of Pathology
University of Toledo College of Medicine, Toledo, OH

9/1995 – 8/2003 Services included conventional and molecular cytogenetics.

RESEARCH PROJECTS

Embark Project – *The Clinical Significance of IGH Gene Deletion in Plasma Cell Myeloma Patients With t(11;14)(q13;q32); IRB#: 2015-218, Graduate: Omar Moinuddin.*

Embark Project – *My Father's Diagnostic Odyssey – A Clinical Investigation Graduate: Alexander Aram.*

Embark Project – *Analysis of the Incidence of Genomic Aberrations and Survival Outcome Among Patients Diagnosed with CLL at William Beaumont Hospital between 2010 and 2015; IRB#: 2015-462, Graduate Ifabiyi Tolulope.*

Embark Project – *Assessment of Oakland University Student's Knowledge, Attitudes, and Willingness to Submit Their DNA to Sequence for the Sole Purpose of Medical Research, Graduate: Moses Evbuomwan.*

- Embark Project – Evaluation of Copy Number variants of Uncertain Significance in Neurodevelopmental Disorders from Clinical Chromosomal Microarrays, M4 Student John Nguyen.
- Embark Project – An Analysis of Socioeconomic and racial Differences in the Health Outcomes of Multiple Myeloma patients, Graduate: David Schoenfeld, IRB# 2017-404.
- Utilization of Deep Learning Artificial Intelligence to Evaluate FISH Studies: IRB# 2017-082.
 - The Genetic Link between Chronic Lymphocytic Leukemia & Hairy Cell Leukemia: A Case Study Evaluation of Familial Cancer: IRB# 2016-316.
 - SNP Chromosome Microarray Evaluation of Pediatric Acute Leukemia's, IRB# 2017-311.

COMMITTEES

- 2007 – present Corewell Health Beaumont Health System Biosafety Committee
- 2011 – 2014 Oakland University William Beaumont Institute for Stem Cell and Regenerative Medicine
- 2011 – present Oakland University William Beaumont School of Medicine M1/M2 Curriculum Subcommittee
- 2013 – present Corewell Health Beaumont Laboratory Molecular Best Practice Committee

PUBLICATIONS

Peer-Reviewed Journals

Micale MA (2021): Therapy-related myeloid-neoplasia. Atlas Genet Cytogenet Oncol Haematol. *In press*
 Online version: <http://AtlasGeneticsOncology.org/Anomalies/TherapyRelated/LeukID1303.html>

Ysunza PA, Rontal M, **Micale M** (2019): Occult subtotal cleft of the secondary palate with VPI associated with 8q22.2 deletion. International Journal of Pediatric Otorhinolaryngology 124: 54-58.

Gupta A, Gabbard A, Smith MD, **Micale MA**, Boyanton BL, Huang J (2019): Biclonal splenic marginal zone lymphoma with T-cell rich background and aggressive transformation to large cell lymphoma, Journal of Hematopathology 12: 91-98.

Micale MA (2018): t(14;20)(q32;q12) IGH/MAFB in Plasma Cell Myeloma. Website: Atlas Genetics Oncology. <http://AtlasGeneticsOncology.org/Anomalies/t1420q32q12IGHMAFBID1313.html>

Gupta A, **Micale M**, Bernacki K (2018): Fluorescence in situ hybridization analysis on cytologic smears: An accurate and efficient method in the diagnosis of melanocytic Xp11 translocation renal cancer, Diagn Cytopathol 46(9): 786-789.

Micale MA (2018): Pediatric T-cell Acute Lymphoblastic leukemia. Atlas Genet Cytogenet Oncol Haematol. 22(11): 451-464. <http://atlasgeneticsoncology.org/Anomalies/PediatrTCellALLID1292.html>

Micale MA, Powers S, Embrey IV B, Williams J, Burroughs M, Huang JZ (2017): Significant Cytogenetic Evolution Identified by SNP Chromosome Microarray Analysis Accompanies Plasmablastic Transformation of a Hyperdiploid Plasma Cell Myeloma. *Journal of Hematopathology* 10: 133-140.

Yu Z, Pang Y, Wang L, Ezekwudo DE, Ogunleye F, Gaikazian SS, **Micale M**, Huang J, Blenc AM, Jaiyesimi I (2017): Unusual presentation of a small-cell variant of anaplastic large cell lymphoma case: when a septic picture is not sepsis. *Case Reports in Hematology*, Article ID 7292148.

Micale MA, Embrey B, Hubbell K, Beaudry-Rodgers K, Whitten A (2017): Prenatal Identification of two discontinuous maternally-inherited chromosome 7q36.3 microduplications totalling 507kb including the SHH gene in a fetus with multiple congenital anomalies. *Clin Case Rep* 5(6), 993-999.

Haberichter K, Crisan D, **Micale MA** (2016): ALK-negative anaplastic large T-cell lymphoma with a complex karyotype and DUSP22 gene rearrangement. *CAP Today* 30(9), 49-54.

Micale MA, Embrey B, Macknis JK, Harper CE, Aughton DJ (2016): Constitutional 560.49 kb Chromosome 2p24.3 Duplication Including the MYCN Gene Identified by Chromosome Microarray Analysis in a Child with Multiple Congenital Anomalies and Bilateral Wilms Tumor. *European Journal of Medical Genetics* 59(12): 618-623.

Ysunza A, Chaiyasate K, **Micale MA**, McBrien M, Bloom DA, Gibson DP, Weinhouse E (2014): 22q11.2 deletion detected by endoscopic observation of pharyngeal pulsations in a child with submucous cleft palate and persistent velopharyngeal insufficiency. *Int J Pediatr Otorhinolaryngol* 78(10), 1789-94.

Seeley A, Durham M, **Micale M**, Wesolowski J, Foerster B, Martin D (2014). Macrocerebellum, Epilepsy, Intellectual Disability and Gut Malrotation in a Child with a 16p24.1-q24.2 Contiguous Gene Deletion. *Am J Med Genet A*. 164(8), 2062-8.

May JG, Shah P, Sachdeva L, **Micale M**, Kruper GJ, Sheyn A, Coticchia JM (2014): Potential Role of Biofilms in Deep Cervical Abscess. *Int J Pediatric Otorhinolaryngology*, 78, 10-13.

Ysunza A, Shaheen K, Aughton DJ, **Micale MA**, Merson R, Rutkowski K (2013): Velopharyngeal Insufficiency, Submucous Cleft Palate and a Phonological Disorder as the Associated Clinical Features Which Led to the Diagnosis of Jacobson Syndrome. *Case Report and Review of the Literature. Int J Pediatr Otorhinolaryngol*, 77(9), 1601-5.

Bhandarkar V, Kwong K, **Micale M**, Coticchia J (2013): Pathology Quiz Case 1: Hyalinizing Spindle Cell Tumor with Giant Rosettes (HSCTGR). *JAMA Archives of Otolaryngology-Head and Neck Surgery*, 139(5), 525-527.

Muslimani A, Chisti MM, Margolis J, Nadeau L, Hong Y, **Micale M**, Huang J, Jaiyesimi I (2013): Pulmonary Infiltrates in Acute Myeloid Leukemia During Induction Treatment. How Much Do We Know? *Am J Clin Oncol* Jan 24 [Epub ahead of print].

Karima AT, Jami S, Mody R, Knaus A, **Micale M**, Huang J (2012): Secondary Acute Myelogenous Leukemia (AML) with Trisomy 10 and Deletion 9q21 Following Precursor B-Cell Acute Lymphoblast Leukemia (ALL) with a Hyperdiploid Karyotype. *Cancer Genet* 205(10), 533-566.

Muslimani A, Chisti MM, Boxwala I, Blenc AM, Jaiyesimi I, **Micale MA** (2012): Langerhans/Dendritic Cell Sarcoma Arising from Hairy Cell Leukemia: A Rare Phenomenon. *Ann Hematol* 91(9): 1485-1487.

Glazyrin A, Douglas-Nikitin V, Huang J, **Micale M** (2011): Transformation of Double-Hit Large B-Cell Lymphoma into Precursor B-Lymphoblastic Lymphoma: A Case Report. *J Hematopathology*, 4(4): 199-205.

Torabi A, Christi M, Brahmanday G, Douglas-Nikitin V, Muslimani A, Jaiyesimi I, Embrey B, **Micale M** (2011): Therapy-related T-Cell Lymphoblastic Lymphoma and Inv(11)(q21q23) Following Acute Promyelocytic Leukemia Chemotherapy. *J Hematopathology*, published online 01 June, 2011.

Snape K, Hanks S, Ruark E, Barros-Nunez P, Elliott A, Murray A, Lane AH, Shannon N, Callier P, Chitayat D, Clayton-Smith J, FitzPatrick D, Gisselsson D, Jacquemont, Asakura-Hay K, **Micale M**, Tolmie J, Turnpenny P.

Wright M, Douglas J, Rahman N (2011): Mutations in CEP57 Cause Mosaic Variegated Aneuploidy Syndrome. *Nature Genetics*, June 43(6): 527-9.

Bhagavathi S, **Micale M**, Douglas-Nikitin V, Ballouz S, Neumann K, Blenc AM (2011): Composite Biclinal Marginal Zone Lymphoma of Lung and Chronic Lymphocytic Leukemia: Pathologic, Phenotypic, Cytogenetic and Molecular Study. *Int J Surg Pathol*, Jun 19(3): 377-81.

Micale M, Insko J, Ebrahim SAD, Adeyinka A, Runke C, Van Dyke DL (2010): Double Trisomy Revisited - A Multicenter Experience. *Prenatal Diagnosis*, 30(2): 173-176.

Bhagavathi S, **Micale M**, Les K, Wilson JD, Wiggling ML, Fu K (2009): Primary Bone Lymphoma: Clinicopathological Study of 21 Cases. *American Journal of Surgical Pathology*, Oct;33(10): 1463-1469.

Zyrek-Betts J, **Micale M**, Lineen A, Chaudhuri P, Keil S, Xue J, Thomas J (2008): Malignant Blue Nevus with Lymph Node Metastasis. *J Cutan Pathol* 35: 651-657.

Van Dyke DL, Ebrahim SA, Al Saadi AA, Powell SA, Zenger-Hain JL, **Micale MA**, Wiktor AE, Zou YS (2007): The Impact of Maternal Serum Screening Programs for Down Syndrome in Southeast Michigan, 1988-2003. *Prenatal Diagnosis* 27(6): 583-584.

Micale M, Schran D, Emch S, Kurczynski TW, Rahman N, Van Dyke DL (2007): Mosaic Variegated Aneuploidy Without Microcephaly: Implications for Cytogenetic Diagnosis. *American Journal of Medical Genetics A*. 143(16): 1890-1893.

Dewald GW, Stallard R, AlSaadi A, Arnold S, Blough R, Ceperich TM, Elejalde BR, Fink J, Higgins JV, Higgins RR, Hoeltge GA, Hsu WT, Johnson EB, Kronberger D, McCorquodale DJ, Meisner LF, **Micale MA**, Oseth L, Payne JS, Schwartz S, Sheldon S, Sophian A, Storto P, VanTuinen P, Wenger GD, Wiktor A, Willis LA, Yung JF, Zenger-Hain J (2000): A Multi-Center Investigation with D-FISH BCR/ABL1 Probes. *Cancer Genetics and Cytogenetics*, 116: 97-104.

Thomas JE, Lorber J, **Micale M**, Booth RL (1999): Morphologic, Flow Cytometric, and Cytogenetic Findings in Erythroleukemia. *Check Sample, Hematopathology No. HP 99-5 (HP-37) [Hematopathology, 5(5); 71-83]*.

Christ LA, Crowe CA, **Micale MA**, Haren JM, Conroy JM, Schwartz S (1999): Chromosome Breakage Hotspots and Delineation of the Critical Region for the 9p-Deletion Syndrome. *American Journal of Human Genetics* 65: 1387-1395.

Dewald GW, Stallard R, AlSaadi A, Arnold S, Bader, PI, Blough R, Chen K, Elejalde BR, Harris CJ, Higgins RR, Hoeltge GA, Hsu WT, Kubie V, McCorquodale DJ, **Micale MA**, Moore JW, Phillips RM, Scheib-Wixted S, Schwartz S, Siembieda S, Strole, VanTuinen P, Vance GH, Wiktor A, Wise L, Yung JF, Zenger-Hain J, Zinsmeister A (1998): A Multicenter Investigation with Interphase Fluorescence In-Situ Hybridization Using X- and Y-Chromosome Probes. *American Journal of Medical Genetics* 76: 318-326.

Micale MA, Wolff D, Dickerman LH, Redline R, Schwartz S (1996): Cytogenetic and Molecular Genetic Characterization of Trisomy 20 Mosaicism in Fetal Blood and Tissues. *Prenatal Diagnosis* 16, 893-897.

Schwartz S, **Micale MA** (1995): Fluorescence In-Situ Hybridization (FISH) Using Uncultured Amniocytes. *Current Protocols in Human Genetics*, Suppl 5, 8.9.1-8.9.15.

Micale MA, Haren JM, Conroy JM, Crowe CA, Schwartz S (1995): Parental Origin of De Novo Chromosome 9 Deletions in Del(9p) Syndrome. *American Journal of Medical Genetics* 57, 79-81.

Micale MA, Visscher DW, Gulino SE, Wolman SR (1994): Chromosomal Aneuploidy in Proliferative Breast Disease. *Human Pathology* 25(1): 29-35.

Visscher DW, **Micale MA**, Crissman JD (1993): Mechanisms and Pathologic Relevance of Cytophotometric DNA Content in Breast Tumor Progression. *Journal of Cellular Biochemistry* 17G: 114-122.

Macoska JA, **Micale MA**, Sakr WA, Benson PD, Wolman SR (1993): Extensive Genetic Alterations in Prostate Cancer Revealed by Dual PCR and FISH Analysis. *Genes Chromosomes and Cancer* 8: 88-97.

Micale MA, Sanford JS, Powell IJ, Sakr WA, Wolman SR (1993): Defining the Extent and Nature of Cytogenetic Events in Prostatic Adenocarcinoma: Paraffin FISH vs. Metaphase Analysis. *Cancer Genetics and Cytogenetics* 69: 7-12.

Pretlow TG, Wolman SR, **Micale MA**, Pelley RJ, Kursh ED, Resnick MI, Bodner DR, Jacobberger JW, Delmoro CM, Ciaconia JM, Pretlow TP (1993): Xenografts of Primary Human Prostate Cancer. *Journal of the National Cancer Institute* 85: 394-398.

Micale MA, Mohamed A, Sakr WA, Powell IJ, Wolman SR (1992): Cytogenetics of Primary Prostatic Adenocarcinoma – Clonality and Chromosome Instability. *Cancer Genetics and Cytogenetics* 61: 165-173.

Wolman SR, Macoska JA, **Micale MA**, Sakr WA (1992): An Approach to Definition of Genetic Alterations in Prostate Cancer. *Diagnostic Molecular Pathology* 1(3): 192-199.

Invited Book Chapters

Micale M, Mohamed AN (2012): Molecular Cytogenetic (FISH) Analysis of Hematolymphoid Disorders. In: *Laboratory Hematology Practice*, 1st Ed. Wiley-Blackwell.

Micale M (2011): Classical and Molecular Cytogenetic Analysis of Hematolymphoid Disorders. In *Hematopathology: Genomic Mechanisms of Neoplastic Diseases*. 1st Ed. Humana Press.

POSTERS AND PUBLISHED ABSTRACTS

Micale MA, Martin B, Qu Z (2020): Machine learning can identify abnormal chromosomes to facilitate initial screening in the cytogenomics laboratory. 2020 College of American Pathologists Annual Meeting, Las Vegas, NV.

Wu J, Deebajah MM, Lai Z, **Micale M**, Yu L (2019): Utilization of deep neural network in recognition of BCR/ABL gene rearrangements in fluorescence in situ hybridization images. 2019 United States and Canadian Academy of Pathology Annual Meeting, National Harbor, MD.

Micale MA, Embrey B, Kumar T (2019): Single nucleotide polymorphism microarray analysis of pediatric leukemia reveals focus pathogenic copy number variation, acquired uniparental disomy, and chromothripsis. 2019 American College of Medical Genetics Meeting, Seattle, WA.

Micale MA, Embrey B, Knaus A (2017): One Children's Oncology Group cytogenetics laboratories' experience with single nucleotide polymorphism chromosome microarray analysis of pediatric acute leukemia's. 2017 Association for Molecular Pathology Annual Meeting, Salt Lake City, UT.

Gupta A, **Micale M**, Bernacki K (2017): Fluorescence in situ hybridization analysis on cytologic smears: an accurate and efficient method in the diagnosis of melanotic Xp11 translocation renal cancer. 2017 College of American Pathology Annual Meeting, National Harbor, MD.

Qu Z, **Micale MA**, Zhang PL (2017): A Web-Based Pathology Reporting System Enhances Efficiency and Promotes Standardization in Routine Practice. 2017 USCAP Meeting, San Antonio, TX.

Ogunleye F, Ibahim M, Blackenship L, Yadav S, **Micale MA**, Douglas V, Ifabiyi T, Anderson J, Stender M, Huben M, Quiroz E, Gaikazian S, Jaiyesimi I (2016): Analysis of genomic aberrations and its impact on survival in patients with chronic lymphocytic leukemia (CLL) at Beaumont Hospital Cancer Center. 2016 American Society of Hematology Meeting on Hematologic Malignancies, San Diego, CA.

Zhang PL, Hysell CK, Kanaan HD, **Micale MA** (2016): The effective use of molecular cytogenetic (FISH) analysis on touch preparation slides permits a timely diagnosis of synovial sarcoma – Lessons learned. American Society of Clinical Pathology Annual Meeting, Las Vegas, NV.

Zhang PL, Hysell CK, Qu ZH, **Micale MA** (2016): Definitive cytogenetic confirmation of a desmoplastic small round blue cell tumor (DSRCT) in the small bowel of 20-year-old man – Case report. American Society of Clinical Pathology Annual Meeting, Las Vegas, NV.

Micale MA, Embrey B, Hubbell K, Beaudry-Rodgers K, Whitten A (2016): Prenatal Identification of two discontinuous maternally-inherited chromosome 7q36.3 microduplications totalling 507kb including the SHH gene in a fetus with multiple congenital anomalies. American College of Medical Genetics and Genomics Annual Meeting, Tampa, FL.

Eskandari M, Amin MB, Qu Z, **Micale MA**, Li W, Zhang PL, Liu JJ. (2014): Biopsy identification of renal synovial sarcoma, Case Report. College of American Pathology Annual Meeting, September 7-10, Archive Pathol Lab Med, 138 (9): e-62

Chen X, Huang J, Xie M, Wey E, **Micale M** (2014): Acute Myeloid Leukemia (AML) with mutated NPM1 with morphological and immunophenotypical features mimicking acute promyelocytic leukemia (APL). College of American Pathology Annual Meeting, September 7-10.

Micale MA, Embrey B, Macknis JK, Harper CE, Aughton DJ (2013): Constitutional 560.49kb Chromosome 2p24.3 Duplication Including the MYCN Gene Identified by SNP Chromosome Microarray Analysis in a Child with Multiple Congenital Anomalies and Wilms Tumor. American Society of Human Genetics Annual Meeting, Boston, MA.

Micale M, Aughton D, Harper C, Embrey B (2012): Constitutional CMA: Our Experience at Beaumont and Presentation of an Unusual Case. American College of Medical Genetics Annual Meeting, Charlotte, NC.

Ming Xie MD; Xia Chen MD; Adil Akhtar MD; James Huang MD; Bobby L. Boyanton Jr. M.D. and **Mark Micale Ph.D.** (2010): 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. ASCP 2010 Annual Meeting, San Francisco, CA.

Bhagavathi S, **Micale M**, Les K, Wilson JD, Wiggling ML, Fu K (2009): Primary Bone Lymphoma: Clinicopathological Study of 21 Cases and Review of Literature. United States and Canadian Academy of Pathology, Denver, CO.

Reyes AR, Crisan D, Farinola MA, Embrey B, Kalmanek V, **Micale M** (2008): Burkitt Lymphoma with t(14;18) and c-MYC Gene Rearrangement But Lacking the Burkitt-Associated Translocations t(8;14), t(2;8), and t(8;22). Pathology of the 21st Century: Integrating Diagnostic and Molecular Pathology, M.D. Anderson Cancer Center, Houston, TX.

Micale M, Insko J, Ebrahim SAD, Runke C, Van Dyke DL (2008): Double Trisomy Revisited-A Multicenter Experience. American College of Medical Genetics Annual Meeting, Phoenix, AZ.

Schran D, Emch S, Kurczynski T, **Micale M**, Van Dyke DL (2006): Mosaic Trisomy 19 or Mosaic Variegated Aneuploidy? Association for Genetic Technologists Annual Meeting, Baltimore, MD.

Micale M, Schran D, Emch S, Kurczynski TW, Rahman N, Van Dyke DL (2007): Mosaic Variegated Aneuploidy Without Microcephaly: Implications for Cytogenetic Diagnosis. American College of Medical Genetics Annual Meeting, Nashville, TN.

Zyrek-Betts J, **Micale M**, Lineen A, Chaudhuri PK, Keil S, Xue J, Thomas JE (2005): Malignant Blue Nevus with Lymph Node Metastasis. American Society of Dermatopathology Annual Meeting, Seattle, WA.

MA Micale, TW Kurczynski, W Gunning, J Thomas (2005): A Paracentric Chromosome 2 Inversion Associated with Elastic Fiber Degeneration and Cutis Laxa in a Multigenerational Family. American College of Medical Genetics Annual Meeting, Dallas. TX.

Kurczynski TW, **Micale MA**, French BF (2003): Maternally Inherited Ins(X;19) Resulting in Partial Trisomy 19q. *Genetics in Medicine*, Vol 5(3): A120.

Micale MA, Kurczynski TW, Curtin W, Myers L, Marcotte M (2001): Paracentric Inversion of Chromosome 2 [inv(2)(q21q35)] in a Family with Cutis Laxa. *American Journal of Human Genetics*, Suppl Vol 69(4): A881.

McGuire SM, Crowe CA, **Micale MA**, Wolff DA, Zackowski JL, Christ LA, and Schwartz S (2000): Phenotype / Karyotype Correlations and Definition of a Critical Region in Duplication 9p syndrome. *American Journal of Human Genetics*, Suppl Vol 67(4): A263.

Micale MA, Ebrahim SAD (1999): Diagnostic Dilemmas in Prenatal Identification of XX/XY Mosaicism. *American Journal of Human Genetics*, Suppl Vol 63 (4): A2075.

Kurczynski TW, Durliat T, **Micale MA**, Hampton A, French B, Gaba C, Schwartz S (1999): Cytogenetic and Molecular Studies of an Unusual Presentation of Turner Syndrome With 45,X / 46,X,der(X)t(X;7) Mosaicism. *American Journal of Human Genetics*, Suppl Vol 65 (4): A923.

Micale MA, Kurczynski TW, French B, Bradley B, You M, Herzog C, Schwartz S (1998): An Unusual Cytogenetic Presentation of Trisomy 9p Syndrome. *American Journal of Human Genetics*, Suppl Vol 63 (4): A815.

Kurczynski TW, **Micale MA**, Assad S, Gaba CG, French BF (1998): Opitz G/BBB Syndrome in a Male Child With an Unbalanced der(3)t(3;14)(q29;q11.2),-14 Karyotype. *American Journal of Human Genetics*, Suppl Vol 63 (4): A610.

Heil M, Ebrahim SAD, Van Dyke DL, **Micale MA**, Kurczynski TW (1997): Mosaicism for a Balanced Structural Chromosome Rearrangement. *American Journal of Human Genetics*, Suppl Vol 61 (4): A127.

Becker LA, Crowe CA, Conroy JM, Haren JM, **Micale MA**, Schwartz S (1996): Cytogenetic and Molecular Analysis of Breakpoints and Delineation of the 9p Deletion Syndrome. *American Journal of Human Genetics*, Suppl Vol 58 (4): A613.

Micale MA, Wolff D, Dickerman LH, Redline R, Schwartz S (1995): Cytogenetic and Molecular Genetic Characterization of Trisomy 20 Mosaicism in Fetal Blood and Tissues. *American Journal of Human Genetics*, Suppl Vol 57 (4): A1652.

Micale MA, Visscher DW, Gulino SE, Wolman SR (1993): Chromosomal Aneuploidy in Proliferative Breast Disease. *American Journal of Human Genetics*, Suppl Vol 53 (3): A328.

Micale MA, Sanford JS, Sakr WA, Powell IJ, Wolman SR (1993): Intra- and Inter-glandular Genetic Heterogeneity Revealed by Fluorescence in Situ Hybridization in Prostatic Adenocarcinoma. *Cancer Genetics and Cytogenetics*.

Micale MA, Visscher DW, Smilanetz S, Wolman SR (1993): Chromosome Aneuploidy Revealed by Molecular Cytogenetics in Proliferative Breast Disease. *Laboratory Investigation* 68: (A81) 17A.

Micale MA, Sanford JS, Sakr WA, Powell IJ, Wolman SR (1992): Differences in Cytogenetic Aberrations of Primary Prostatic Adenocarcinoma Revealed by Metaphase Analysis and Interphase Cytogenetics. *American Journal of Human Genetics, Suppl Vol 51 (4): A65*.

Powell IJ, Gimotty P, Wolman SR, **Micale MA**, Betrus G, Pontes JE (1992): Clinical and Cytogenetic Correlations and Trends in Prostate Cancer. *Journal of Urology, Suppl Vol 147(4): 359A*.

Macoska JA, **Micale MA**, Mohamed A, Powell IJ, Lane MA, Wolman SR (1991): Molecular Genetic and Karyotypic Alterations in Prostate Cancer. *American Journal of Human Genetics, Suppl Vol 49(4): A245*.

Wolman SR, Mohamed A, **Micale MA**, Macoska JA, Lane MA, Powell IJ (1991): Cytogenetic and Molecular Studies of Primary Prostatic Adenocarcinomas. *Cancer Genetics and Cytogenetics* 56: A15.

INVITED PLATFORM PRESENTATIONS

The Evolution of Molecular Pathology: From Chromosomes to ~20,000 Genes in Thirty Years: Michigan Society of Pathology Winter Meeting. December 5, 2020.

Genomic (Next-Generation) Sequencing for Diagnosing Constitutional Genetic Diseases- The Bird'-Eye View. 25th Annual Symposium on Molecular Pathology: Clinical Applications of Genomic Medicine. Troy, MI. September 21, 2016.

Characterizing Complex Rearrangements in Pediatric ALL and AML Using FISH and SNP Array. Children's Oncology Group Cytogenetics Workshop 2015. St. Louis, MO. April 24-25, 2015.

Whole-Genome SNP Array Analysis – Genomic Complexity and Clinical Relevance in Prenatal, Postnatal, and Oncology Testing. 22nd Annual Symposium on Molecular Pathology: Clinical Applications of Genomic Medicine. Troy, MI. September 25, 2013.

Unlocking the Diagnostic Potential of Genomic Medicine – The Beaumont DNA Experience. 21st Annual Symposium on Molecular Pathology: Clinical Applications of Genomic Medicine. Troy, MI, September 19, 2012.

Array Based Comparative Genomic Hybridization (Molecular Karyotyping): Applications in the Diagnostic Laboratory. **Micale MA**. 16th Annual Symposium on Molecular Pathology: DNA Technology in the Clinical Laboratory. Troy, MI. September 27, 2007.

Genomic Medicine in the 21st Century. **Micale M**. Invited speaker at the American Society for Clinical Laboratory Science-Ohio Annual Meeting, Toledo, OH. May 4, 2006.

DNA Forensic Identity Testing. **Micale MA**. Plenary scientific presentation at the 27th Annual Association of Genetic Technologists Meeting, Cincinnati, OH. June 21, 2002.

Phenotype/Karyotype Correlations and Definition of a Critical Region in Duplication 9p syndrome. McGuire SM, Crowe CA, **Micale MA**, Wolff DA, Zackowski JL, Christ LA, and Schwartz S. Presented at the Annual Meeting of the American Society of Human Genetics, Philadelphia, PA. October 4-7, 2000.

Delineation of the Critical Region for the 9p Deletion and Duplication Syndromes: Implications for Overlapping Critical Regions. Schwartz S, Crowe CA, Everman D, Eichenmiller M, **Micale MA**, Satinover DL, Christ LA. Presented at the Annual Meeting of the American Society of Human Genetics, San Francisco, CA. October 19-23, 1999.

Molecular Cytogenetic Characterization of a Structurally Abnormal Chromosome 22 in a Patient with Noonan Syndrome. **Micale MA**, Ebrahim S, Mohamed A, Kurczynski TW. Presented at the Great Lakes Regional Genetics Group Annual Meeting, Kansas City, MO. March 28-30, 1996.

Chromosome Aneuploidy Revealed by Molecular Cytogenetics in Proliferative Breast Disease. **Micale MA**, Visscher DW, Smilanez S, Wolman SR. Presented at the Annual Meeting of United States and Canadian Academy of Pathology, New Orleans, LA. March 15, 1993.

Intra- and Inter-glandular Genetic Heterogeneity Revealed by Fluorescence in Situ Hybridization in Prostatic Adenocarcinoma. **Micale MA**, Sanford JS, Sakr WA, Powell IJ, Wolman SR. Presented at the 5th International Workshop on Chromosomes in Solid Tumors, Tucson, AZ. January 13-15, 1993.

Analysis of Cytogenetic and Molecular Genetic Aberrations in Prostate Cancer. Wolman SR, Macoska JA, **Micale MA**, Powell IJ, Sakr WA. Presented at the 6th Annual Prouts Neck Meeting on Prostate Cancer, Prouts Neck, ME. October, 1992.

Tissue Heterogeneity in Human Prostate Carcinoma Revealed by Genetic Analysis. Macoska JA, **Micale MA**, Sakr WA, Powell IJ, Pontes JE, Wolman SR. Presented at the Society for Basic Urologic Research Annual Meeting, Washington, D.C. May 9, 1992.

A Method for Retrospective Analysis of Genetic Aberrations in Prostate Cancer. Wolman SR, Macoska JA, **Micale MA**, Sakr WA. Presented at the Annual Meeting of United States and Canadian Academy of Pathology, Atlanta, GA. March 16-20, 1992.

Genetic Instability in Adenocarcinoma of the Prostate. **Micale MA**, Mohamed A, Powell IJ, Wolman SR. Presented at the Society for Basic Urologic Research Annual Meeting, Toronto, Ontario, Canada. June 1, 1991

Cytogenetic and Molecular Studies of Primary Prostate Carcinomas. Wolman SR, Mohamed A, **Micale MA**, Macoska JA, Lane MA, Powell IJ. Presented at the 4th International Workshop on Chromosomes in Solid Tumors, Tucson, AZ. February 24-26, 1991.