# CURRICULUM VITA Marvin E. Miller

#### **BUSINESS ADDRESS**

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## BIRTH DATE

December 19, 1947

**INSTITUTION & LOCATION** 

Trinity College, Hartford, CT

Yale Medical School, New Haven, CT

## BIRTHPLACE Philadelphia, Pennsylvania

## CITIZENSHIP

YEAR

1965-69

1969-73

iladelphia, Pennsylvania United States of America

DEGREE

B.S.

M.D.

#### **EDUCATION**

i ale ivieuic	ai School, New Haven, CT	ווו.ט.	1909-73	
PROFESSIONAL TRAINING AND EXPERIENCE				
1973-74	Pathology Internship, Dartmouth Medical School, Hanover, N.H.			
1974-76	Residency in Pediatrics, Cas Cleveland, OH.	e Western Reserve	e/Cleveland Metro. Gen. Hosp,	
1976-78	Fellow, Medical Genetics, Un	iversity of Washing	gton, Seattle, WA.	
1976-79	Fellow, Dysmorphology, Univ	ersity of Washingt	on, Seattle, WA.	
1978-79	Individual NIH Fellowship, Ur	niversity of Washin	gton, Seattle, WA.	
1979-80	Fellow in Medical Genetics a Seattle, WA.	nd Epilepsy Cente	r, University of Washington,	
1980-86	Assistant Professor of Pediat Rochester, NY.	rics and Genetics,	University of Rochester,	
1980-92	Attending Pediatrician, Strong	g Memorial Hospita	al, Rochester, NY.	
1983-92	Medical Director, 4-3600 floo Hospital, Rochester, NY.	r (children ages 1-	10 years) Strong Memorial	
1986-92	Associate Professor of Pedia Rochester, NY.	trics and Genetics	, University of Rochester,	
1988-92	Medical Director, PKU Clinic,	Strong Memorial I	Hospital, Rochester, NY.	
1989-90	Visiting Scientist, Johns Hopl	kins Medical School	ol, Baltimore, MD.	
1992-	Professor of Pediatrics & Ob/ Medicine, Dayton, OH.	Gyn, Wright State	University Boonshoft School of	
1992-	Director of Medical Genetics Dayton, OH.	and Birth Defects,	Dayton Children's Hospital	
1993 -	Director of Molecular Diagnos CAP certified LAP # 10		MC, Dayton, OH. AU-ID: 1364243	
2003 -	Affiliated Professor of Biomed	ical Engineering, V	Vright State University	

### **MEDICAL LICENSURE**

Ohio

#### **HONORS AND AWARDS**

Honors in Chemistry, Trinity College

Individual NIH Fellowship for study--"Pharmacogenetics of Theophylline" 1978-79

Pilot Project Award from Environmental Health Sciences for study-- "Acetylator Phenotype in Human Bladder Cancer" 1980-81, University of Rochester

BRSG Award from University of Rochester for study--"Cord Blood Bromide Concentration in Newborn Infants" 1984

BRSG Award from University of Rochester for study--"Sweat Bromide Excretion in Cystic Fibrosis" 1984-85

Cystic Fibrosis Foundation New Investigator Award for study-"Sweat Bromide Excretion in Cystic Fibrosis" 1985-87

Gilbert Forbes Housestaff Research Award (faculty sponsor) for study--"Fluid Therapy in Bacterial Meningitis: A randomized prospective study" 1986-87

BRSG Award from University of Rochester for study--"Cl36 Transport in Cultured Sweat Duct Epithelial Cells in Cystic Fibrosis" 1987-88

Strong Children's Research Center Award - "Parental Origin of X-chromosomes in Rett syndrome and Klinefelter syndrome" 1991-1992

Children's Medical Center Research Foundation (Dayton, OH) - Molecular Diagnosis of Fragile X Syndrome in Individuals with Mental Retardation, Learning Disabilities, or Autism, 1993 -1994

Children's Medical Center Research Foundation (Dayton, OH) - "The Use of Computed Tomography for Measurement of Bone Density to Distinguish Fractures of Osteogenesis Imperfecta from Child Abuse", 1995-99

Ohio Department of Health Genetic Services Grant, Region II 1993-present

Wright State University Research Initiation Grant - "Multidrug Resistance (MDR) Protein in Pseudomonas", 1995-1996

AAP Resident Research Award (faculty advisor) for study: "The Frequency of Bordetella Pertussis Infection In a Population of Symptomatic University Students", 1996-1998

Children's Medical Center Research Foundation (Dayton, OH) - "The Effect of Exercise, Vitamin D Receptor Genotype and Calcium-Sensing Receptor Genotype on CT Bone Density in Adolescent Females", 1999-2001

Wright State University School of Medicine Clinical Seed Grant - "The Effect of Exercise on CT Bone Density in 7 Year Old Girls", 1999-2001

Children's Medical Center Research Foundation (Dayton, OH) - "Bone Architecture Parameters in Normal Infants and in Infants with Temporary Brittle Bone Disease" [Grant to support Masters Degree Student (Bino Varghese) in Department of Biomedical Engineering] 2004-2006

Children's Medical Center Research Foundation (Dayton, OH) – "Bone Density Measurements in Children Using Spiral Computed Tomography" (with Dr. Elizabeth Ey and Dr. Thomas Hangartner) February 1, 2007- 2012, \$40,000

Children's Medical Center Research Foundation (Dayton, OH) – "Measurement of Bone Architecture Parameters in Normal Infants and in Infants with Multiple Unexplained Fractures from Digital Skeletal Surveys" (with Dr. Elizabeth Ey and Dr. Thomas Hangartner) January 1 2013 – December 31, 2014 \$33,551 Award provides support for Master's Degree Student Candidate, Iman Eizadynejad

#### MAJOR RESEARCH INTEREST

Biochemical Genetics Molecular Genetics Pediatric Bone Health Bone Disease in Infants

#### **MAJOR MEDICAL PRACTICE**

**Medical Genetics** 

- a. Biochemical Genetics
- b. Molecular Genetics
- c. Dysmorphology

**General Pediatrics** 

Pediatric Bone Disease and Health

#### MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Society of Human Genetics Society for Pediatric Research Fellow, American College of Medical Genetics Fellow, American Academy of Pediatrics International Bone and Mineral Society

#### **SPECIALTY BOARDS**

Pediatrics (1978) Medical Genetics (1990)

- a. Clinical Genetics
- b. Biochemical/Molecular Genetics

#### MASTERS DEGREE STUDENT SUPERVISION

#### **Department of BioMedical Engineering**

Bino Varghese: 7-1-04 to 12-13-2005

Successful defense of study: Evaluation of Bone Strength in Infants Using Finite Element
Analysis Based on Radiographs of the Radius

#### **Department of Pharmacology**

Amod Joshi: 2009-2011

Successful defense of study: Analysis of archived dried blood spots by mass

spectrometry for vitamin D and real-time PCR for its enzymes and receptor

#### **Department of BioMedical Engineering**

Iman Eizadynejad: 1-1-2013 to 12-31-2014

Ongoing study: Measurement of Bone Architecture Parameters in Normal Infants and in Infants with Multiple Unexplained Fractures from Digital Skeletal Surveys

#### **BIBLIOGRAPHY**

#### **Original Articles**

- Miller ME. Arterial permeability to native and succinylated betalipoproteins Yale Medical School Thesis, 1973.
- Miller ME, Motulsky AG. Noonan syndrome in an adult family presenting with chronic lymphedema. Amer J Med 1978;65:379-383.
- Miller ME, Hall JG. Possible maternal effect on severity of neurofibromatosis. Lancet 1978;2:1071-1073.
- Miller ME, Dunn PM, Smith DW. Uterine malformation and fetal deformation. J Ped 1979;94:387-390.
- Miller ME, Smith DW. Conotruncal malformation complex. Pediatrics 1979;63:890-893.
- Miller ME, Kaufman G, Reed G, Bilenker R, Schinzel A. Familial, balanced insertional translocation leading to offspring monosomic and trisomic for the inserted segment 7p15-7p21. Amer J Med Genet 1979;4:323-332.
- Miller ME, Fineman R, Smith DW. The postaxial acrofacial dysostosis syndrome. J Ped 1979;95:970-975.
- Miller ME, Hall JG. Familial Asymmetric Crying Facies. Its occurrence secondary to hypoplasia of the anguli oris depressor muscles.

  Am J Dis Child 1979;133:743-746.
- Graham J, Miller ME, Stephan M, Smith DW. Limb reduction anomalies and early in utero limb compression. J Ped 1980;96:1052-1056.
- Miller ME, Higginbottom M, Graham J, Smith DW. Compression related defects from early amnion rupture: Evidence for mechanical teratogenesis. J Ped 1981;98:292-297.
- Miller ME, Higginbottom M, Smith DW. The short umbilical cord its origin and relevance. Pediatrics 1981;67:618-621.
- Miller ME, Garland WA, Min BH, Ludwick BT, Ballard RH, Levy RH. Acetylation of clonazepam in fast and slow acetylators.

  Clin Pharmacol Ther 1981;30:343-347.
- Stamatoyannopoulos G, Nute PE, Miller ME. De Novo mutations producing unstable hemoglobins or hemoglobins M. I. Establishment of a depository and use of data to test for an association of de novo mutation with advanced parental age. Hum Genet 1981;58:396-404.
- Miller ME, Cohn RD, Burghart PH. Hydrochlorthiazide disposition in a mother and her breast fed infant. J Ped 1982;101:789-791.
- Miller ME, Jones MC, Smith DW. Tension--the basis of umbilical cord growth. J Ped 1982;101:844.
- Miller ME, Cosgriff JM. Acetylator phenotype in human bladder cancer. J Urology1983;130:65-66.
- Miller ME, Cosgriff JM. Hematological abnormalities in newborn infants with Down syndrome. Am J Med Genet 1983;16:173-177.
- Miller ME. Structural defects as a consequence of early intrauterine constraint: limb deficiency, polydactyly and body wall defects.

  Sem Perinat 1983;12:274-277.
- Miller ME, Opheim KE, Raisys VA, Motulsky AG. Theophylline metabolism: Variation and genetics. Clin Pharmacol Ther 1984;35:170-182.

- Miller ME, Cosgriff JM. No effect of smoking on sulfamethazine acetylation. Drug Intell Clin Pharm 1984;18:620-622.
- Miller ME, Cosgriff JM, Kwong T, Morken DA. The influence of phenytoin on theophylline clearance. Clin Pharmacol Ther 1984;35:666-669.
- Cappon CJ, Miller ME, Cosgriff JM. Separation of theophylline and its metabolites by reversed-phase HPLC. LC Mag 1984;2:304-307.
- Miller ME, Cappon CJ. Anion-exchange chromatographic determination of bromide in serum. Clin Chem 1984;30:781-783.
- Daiger SP, Miller ME, Chakraborty R. Heritability of quantitative variation at the group-specific component (Gc) locus. Am J Hum Genet 1984;36:663-676.
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- Miller ME, Kido D, Horner F. Cavum Vergae-Association with neurologic abnormality and diagnosis by MRI. Arch Neur 1986;43:821-824.
- Miller ME, Cosgriff JM, Schwartz RH. Sweat bromide excretion in cystic fibrosis. J Lab Clin Med 1986;108:406-410.
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- Metlay L, Smythe PS, Miller ME. Familial CHARGE Association: Case report with autopsy findings. Am J Med Genet 1987;26:577-581.
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- Miller ME and Sulkes S. Firesetting behavior in Klinefelter syndrome. Pediatrics 1988;82:115-117.
- Miller ME, Cosgriff JM, and Forbes GB. Determination of bromide space using anion-exchange chromatography for measurement of bromide.

  Am J Clin Nutr 1989;50:168-171.
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- Sherer DM, Wang N, Thompson HO, Peterson JC, Miller ME, Metlay LA, and Abramowicz, J. An infant with Trisomy 9 mosaicism presenting as a complete trisomy 9 by amniocentesis. Prenat Diagn. 1992;12:31-37.
- Miller ME, Brooks J, Forbes N, and Insel R. Frequency of medium chain acyl-CoA dehydrogenase deficiency G-985 mutation in sudden infant death syndrome. Pediatr Res 1992, 31:305-307.
- Miller ME, Boehm C, Cotton M, and Kazazian H. Usefulness of a CACA repeat polymorphism in genotype assignments in Duchenne/Becker muscular dystrophy. Am J Med Gen 1992;44:473-476.
- Miller ME, Plumeau P, and Blakely E. Elevated blood phenylalanine concentrations in benign hyperphenylalaninemia from improperly diluted evaporated milk. Clinical Pediatrics 1992;32:124-125.
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  Osteoporosis International 1999;9:427-432
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- Miller ME. The lesson of temporary brittle bone disease: All bones are not created equal. Bone 2003;33:466-474
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- Acosta PB, Yannicelli S, Ryan AS, Arnold G, Marriage BJ, Plewinska M, Bernstein L, Fox J, Lewis V, Miller M, and Velazquez. Nutritional therapy improves growth and protein status of children with urea cycle enzyme defect.

  Molecular Genetics and Metabolism 2005;86:448-155
- Varghese B, Miller ME, Hangartner TN. Estimation of bone strength from pediatric radiographs of the forearm. J Musculoskelet Neuronal Interact 2008;8(4):379-390 (This article reports altered architecture parameters and lower bone strength in infants with temporary brittle bone disease compared to controls.)
- Miller R and Miller ME. Overrepresentation of males in traumatic brain injury of infancy and in infants with macrocephaly: Further evidence that questions the existence of shaken baby syndrome.
  - American Journal of Forensic Medicine and Pathology 2010;31:165-173.
- Ayoub D, Hyman C, Cohen M, and Miller ME. A critical review of the classic metaphyseal lesion (CML): Traumatic or metabolic? AJR 2014; 202:185–196
- Miller ME, Ward T, Stolfi A, and Ayoub D. Overrepresentation of multiple birth pregnancies in young infants with four metabolic bone disorders: Further evidence that fetal bone loading is a critical determinant of fetal and young infant bone strength. Osteoporos Int 2014;25:1861–1873 DOI 10.1007/s00198-014-2690-9-

Miller D, Barnes P, and Miller ME. The significance of macrocephaly or enlarging head circumference in infants with the triad: Further evidence of mimics of shaken baby syndrome. American Journal of Forensic Medicine and Pathology (accepted for publication, March 2, 2015; DOI 10.1097/PAF 00152; ISSN:0195-7910)

## **Non-Peer Review Articles**

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- Miller ME, Hall JG. Possible maternal effect in neurofibromatosis. The National Neurofibromatosis Foundation Newsletter, Fall 1978.
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- Miller ME. Letter to the Editor. Prune-belly syndrome. Amer J Dis Child 1980;134:1182.
- Miller ME. Book Review. <u>Trisomy 21 (Down Syndrome)</u> Research Perspectives de la Cruz and Gerald. Amer J Dis Child 1981;135:865.
- Miller ME. Book Review. <u>Medical Genetics: Principles and Practice</u> Nora and Fraser. Amer J Dis Child 1982;136:655.
- Miller ME. Letter to the Editor. Prenatal alcohol effect disputed. Pediatrics 1982;70:322.
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- Miller ME. Letter to the Editor. Acetylator phenotype in bladder cancer. Lancet 1982;2:1348.
- Miller ME. Book Review. <u>Das Characterische Syndrom: Blick- diagnose von Syndromen.</u> ed. 3 Wiedemann Amer J Dis Child 1983;137:606.
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- Miller ME. Book Chapters. "Facial Dysmorphism" and "Skin Lesions of the Neonate." In <u>Primary Pediatric Care</u>, Ist ed, edited by R.H. Hoekelman, CV Mosby Co., St. Louis. 1987.
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- Miller ME and Sulkes S. Reply to Letter to The Editor. Klinefelter syndrome and Fire-Setting Behavior. Pediatrics 84:749-750, 1989
- Miller ME and Sulkes S. Reply to Letter to The Editor. Behavior in Klinefelter syndrome, or Where There is Smoke There May not be a Fire. Pediatrics 86:1001-1002, 1990
- Miller ME. Book chapters. "Skin lesions of the Neonate" "Facial Dysmorphism" and "Genetic Diseases" In <u>Primary Pediatric Care</u>, 2nd ed, edited by R.H. Hoekelman. CV Mosby Co., St. Louis, 1992.
- Miller ME, Brooks J, Forbes N, and Insel R. Frequency of G-985 mutation in MCAD deficiency in SIDS in <u>New Developments in Fatty Acid Oxidation</u> eds. Coates and Tanaka. Prog Clin Bio Res 375:495-498, 1992.
- Miller ME. Diagnosis of Fragile X Syndrome Using Molecular Genetic Techniques. Pediatric Forum, (Children's Medical Center, Dayton, Ohio) Winter, 1994.

- Miller ME. Book Chapter. "The Genetic Implications of the Autopsy of the Fetus with Structural Defects." In Diseases of the Fetus and Newborn, 2nd ed. Edited by Reed, Claireaux, and Cockburn. Chapman and Hall, London, 1995.
- Reed G, Miller ME, and Robinson HB. "The Autopsy and Protocols." in Diseases of the Fetus and Newborn, 2nd ed. Edited by Reed, Claireaux, and Cockburn. Chapman and Hall, London, 995.
- Robinow M and Miller ME. Letter to the Editor. Transient Neonatal Arthrogryposis: Another Case. Am J of Med Genet 66:475, 1996.
- Miller ME. Book chapters. "Skin Lesions of the Neonate" "Facial Dysmorphism" and "Genetic Diseases" In <u>Primary Pediatric Care</u>, 3rd ed, edited by R.H. Hoekelman. CV Mosby Co., St. Louis, 1997.
- Miller ME. The Infant with Multiple Unexplained Fractures. Genetic Message (genetic information newsletter of Ohio) 2(1):5, 1999.
- Miller ME. Letter to the Editor. Bone Loading. Am J of Med Genet 91:396-397, 2000.
- Miller ME. Letter to the Editor. Another Perspective as to the Cause of Bone Fractures in Potential Child Abuse. Pediatric Radiol 30:495-496, 2000.
- Miller ME. Book chapters. "Skin Lesions of the Neonate" "Facial Dysmorphism" and "Genetic Diseases" In <u>Primary Pediatric Care</u>, 4th ed, edited by R.H. Hoekelman. CV Mosby Co., St. Louis, 2000.
- Willis L, Callif-Daley, Miller ME. Thrombophilias Update. Pediatric Forum, (Children's Medical Center, Dayton, Ohio) Winter, 12: 10-14, 2001.
- Miller ME. Letter to the Editor. Shaken Impact Syndrome. Lancet 397:1207, 2001.
- Miller ME and Hangartner TN. Response to Letter to the Editor by Ralph Hicks "Relating to methodological shortcomings and the concept of temporary brittle bone disease. Calcified Tissue International 68:316-319, 2001.
- Miller ME and Hangartner TN. Computed tomography (CT) bone density measurements in normal prepubertal and postpubertal females. Pediatric Forum, (Children's Medical Center, Dayton, Ohio) Winter, 13: 17, 2002.
- Miller ME. Letter to the Editor. Fractures during physical therapy. Pediatric Radiol 32:536-537, 2002.
- Miller ME. Letter to the Editor. Infants at higher risk to fracture than the general population. Pediatric Radiol 33:733-734,2003
- Miller ME. Letter to the Editor. Incidence of inflicted traumatic brain injury in infants. JAMA 290:2542-2543, 2003
- Miller ME, Leestma J, Barnes P, Carlstrom T, Gardner H, Plunkett J, Stephenson J, Thibault K, Uscinski R, Niedermier J, and Galaznik J. Letter to the Editor. A Sojourn in the Abyss: Hypothesis, Theory, and Established Truth in Infant Head Injury. Pediatrics 114: 326, 2004
- Lantz PE, Miller ME, and 39 other signatures. Letter to the Editor. The evidence for shaken baby syndrome. Response to Reece et al from 41 physicians and scientists. BMJ 329:741-742, 2004.
- Miller ME. Letter to the Editor. Another perspective on the cause of metaphyseal fractures. Pediatric Radiol 38:598-599, 2008
- Miller ME. Invited commentary. "The death of temporary brittle bone disease is premature" Acta Paediatrica 98:1871-1873, 2009

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- Gabaeff S, Bohan T, Miller ME, Gardner H, Rothfelder R, Scheller J, Posey DM. Letter to the Editor. Flawed Logic. Minnesota Medicine. February, 2010.
- Hyman C, Ayoub D, Miller ME. Response to Taylor et al: Letter to the Editor. Comments on Making the Diagnosis of Rickets in Asymptomatic Young Children. Clin Pediat 2011:50:474
- Hyman CJ, Ayoub, Miller ME. Letter to Editor. Response to Vinchon. Childs Nerv Syst 2011; 27:201
- Miller R and Miller ME. Response to Letter to the Editor by Joe Brierley and Mark J. Peters "Errors of fact and reasoning in consideration of shaken baby syndrome" Am J Forensic Med Pathol 2012;33:e12-13
- Ulman C, Trevino JJ, Miller M, and Ghandi R. Fish Odor Syndrome: A case report of trimethylaminuria: Dermatology Online 2014; 20 (1):19
- Miller ME. Invited Commentary on Fetal Alcohol Spectrum Disorders. Current Problems in Pediatric and Adolescent Health Care. 2014;44:105-06.
- Ayoub D, Miller M, Hyman C. Reply to Response to Letter to the Editor Regarding Classical Metaphyseal Lesion AJR 2014;203:W233
- Wrennall, L. Bache, B. Pragnell, C., Miller ME, et al 2015 Open Letter on Shaken Baby Syndrome and Courts: A False and Flawed Premise, Argument & Critique, Jan. http://www.argumentcritique.com/open-letter-on-sbs.html

#### <u>Abstracts</u>

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- Miller ME, Beckwith B, Hall JG. Histologic features of neurofibromas and their correlation with severity of disease. Am J Hum Genet 30:60A, 1978
- Miller ME, Hall JG. Maternal effect in neurofibromatosis. Am J Hum Genet 30:60A, 1978
- Miller ME, Hall JG. Morbidity of childhood neurofibromatosis in individuals born to affected members. Clin Res 26:177A, 1978
- Miller ME, Schinzel A, Smith DW. Possible monogenic inheritance for conotruncal septation defects in two families. Clin Res 26:177A, 1978
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- Graham JM, Miller ME, Stephan MJ, Smith DW. Limb reduction anomalies and early in-utero limb compression. Clin Res 28:116A, 1980

- Miller ME, Nute PE, Stamatoyannopoulos G. Advanced paternal age in de novo hemoglobin mutations. Clin Res 28:73A, 1980
- Graham JM, Miller ME, Stephan MJ, Smith DW. Limb reduction anomalies and early in-utero compression. Teratology 21:40A, 1980
- Miller ME, Higginbottom MC, Smith DW. Intrauterine constraint as a cause of short umbilical cord. Ped Res 14:586, 1980
- Miller ME, Higginbottom MC, Graham JM, Smith DW. Conditions of limb reduction and body wall closure defects: Features in the spectrum of early amnion rupture malformation sequence. Ped Res 14:586, 1980
- Miller ME, Ludwick BT, Ballard R, Garland WA, Levy RH. Acetylation of 7-aminoclonazepam in fast and slow acetylators.

  American Pharmaceutical Association Abstracts, Washington, DC, 1980.
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- Miller ME, Cosgriff JM, Williams W, McCormick K. Biochemical profiles following aspirin administration in Reye's syndrome patients and controls. Ped Res 18:297A, 1984
- Miller ME, Horner F, Kido D. Cavum Vergae and neurological abnormalities. Ped Res 18:307A, 1984
- Miller ME, Cappon C. Determination of bromide concentration in human serum by ion-exchange HPLC. Clin Chem 30:966, 1984
- Miller ME, Cosgriff JM. Variation and significance of elevated cord serum bromide concentration. Clin Res 19:177A, 1984
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- Miller ME, Cosgriff JM, Schwartz RH. Sweat bromide excretion in cystic fibrosis. CF Club Abstract 27:131, 1986
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- Miller ME, Cosgriff J, and Roghmann K. Cord serum bromide concentration: Variation and correlation with pregnancy outcome. Ped Res 21:400A, 1987
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- Sugarman L, Eskenazi A, Woodin K, Miller ME, McCormick KL, Sladek CD, and Powell KR. Antidiurectic hormone response to restricted vs. replacement therapy in children with meningitis. Ped Res 23:383A, 1988
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- American Academy of Pediatrics Joint Meeting, Boston, Massachusetts. Ped Res. 47:242A, 2000.
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- Miller ME. Association of Ehlers Danlos syndrome with temporary brittle bone disease from fetal immobilization. Poster presentation at the 35<sup>th</sup> annual meeting of the Sun Valley Workshop on Skeletal Biology. J Musculoskel Neuron Interac 2005;5:376
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- Miller ME, Kleiner L. Kluver Bucy syndrome in a child with neurofibromatosis-type1.

  Poster presentation, 58<sup>th</sup> annual meeting of American Society of Human Genetics,
  November 2008, Philadelphia; page 345 of abstract book, abstract #1768, 2009
- Ayoub D, Hyman C, Miller, ME. Metabolic Bone Disease in Young Infants with Multiple Unexplained Fractures: Multifactorial in Etiology and Often Confused for Child Abuse Poster presentation at Gordon Research Conference on "Biomineralization", Colby-Sawyer College, August 15-20, 2010.

- Ayoub D, Hyman C, Miller, ME. Evidence of Metabolic Bone Disease in Young Infants with Multiple Fractures Misdiagnosed as Child Abuse. Poster presentation.
   American Society for Bone and Mineral Research, Toronto, October 15-19, 2010.
   JBMR 2011; Volume 25 Issue Supplement S1 SA0023, page S140.
- Ayoub D, Miller ME, Hyman C. The Forgotten signs of Healing Rickets in Early Infantile Hypovitaminosis D. Radiological Society of North America. Oral Presentation. Chicago, December 3, 2010
- Miller ME, Ayoub D, Hyman C. Metabolic Bone Disease in Young Infants with Multiple Unexplained Fractures: Multifactorial in Etiology and Often Confused for Child Abuse Poster presentation at Pediatric Academic Society Meetings, Denver, April 30- May 3, 2011. Poster #31 in Bone-Vitamin D Section (1403). Page 76 in Program Guide
- Workman H and Miller ME. Favorable Response to Minocycline in Affected Males in a Family with X-linked DLG3 Mental Retardation. Poster Presentation at American College of Medical Genetics, Charlotte, NC, March 2012.
- Hashimoto S, Erdman L, McKinney A, Ramsey S, Weber C, Weslow-Schmidt J,Lamb Thrush D, Atkin J, Baum R, Crowe C, Hickey SE, McBride KL², Miller M, Pfau RB, Astbury C, Gastier-Foster JM¹, Reshmi S, Pyatt RE.

  Are Alterations in the *CHL1* Gene Associated with a Neurodevelopmental Phenotype? 2013 International Collaboration for Clinical Genomics, Bethesda, Md, May, 2013, Poster Presentation
- Workman H, Marvin Miller, Batish S, Kumar G. Dyanmic Duo: TSC1 and TSC2 Mutations in a Single Patient with Tuberous Sclerosis. American College of Medical Genetics Annual Clinical Genetics Meeting 2014, Nashville, TN. Poster #239 (page 117) in Program Guide.
- Miller ME. Elevated 1,25-Dihydroxy Vitamin D Levels in Infants With Multiple Unexplained Fractures: Biochemical Evidence of Metabolic Bone Disease in Infants Alleged To Have Been Abused. Poster presentation at Pediatric Academic Society Meetings, Vancouver, May 3-6, 2014. Poster #198 in Vitamin D/Bone/Calcium Section (3808). Page 242 in Program Guide
- Miller ME and Ayoub D. Elevated 1,25-Dihydroxy Vitamin D Levels in Infants With Multiple Unexplained Fractures: Biochemical Evidence of Metabolic Bone Disease in Infants Alleged To Have Been Abused. Poster presentation at 2014 Vitamin D Workshop, Chicago, June 17-20, 2014. Page 77 of Program Guide
- Ayoub D Hyman C, and Miller ME. Evidence of staged rachitic growth plate healing in infants with unexplained fractures: A proposed classification. Poster presentation at 2014 Vitamin D Workshop, Chicago, June 17-20, 2014. Page 77 of Program Guide

### **Invited National/International Lectures**

- "MCAD Deficiency in SIDS" 2nd International Symposium on Clinical, Biochemical, and Molecular Aspects of Fatty Acid Oxidation, Philadelphia, PA, November, 1991
- "Bone Disease or Child Abuse". Conference at Children's Hospital Medical Center, Cincinnati, OH, June 1, 1995
- "The Relation Between Bone Fracture Frequency and Bone Density in Osteogenesis Imperfecta" 9th National Osteogenesis Imperfecta Foundation Conference, Orlando, FL, July 11-13, 1995

- "The Infant with Multiple Unexplained Fractures: Brittle Bones or Battered Baby?" 5th International Conference of The National Child Abuse Defense and Resource Center, Las Vegas, NV, September 20-22, 1996
- "Unexplained Fractures in Infants" 6th International Conference of The National Child Abuse Defense and Resource Center, Las Vegas, NV, September 11-13, 1997
- "Bone Problems on Different Continents: Child Abuse in the U.S.A." First International Conference on Children's Bone Health, Maastricht, The Netherlands, May 4-7, 1999
- "Overlooked Metabolic Bone Conditions Misdiagnosed as Child Abuse" 10<sup>th</sup>
  International Conference of The National Child Abuse Defense and Resource Center,
  Reno, NV, October 17-19, 2001.
- "Broken Bones and Broken Families" Invited Presentation at 62nd Annual AAPS Meeting, Arlington, Virginia, September 22, 2005
- "Broken Bones and Broken Families" Invited Presentation at symposium sponsored by the Eaton Foundation "The Wrongful Diagnosis of Child Abuse an American Perspective", London, England, May 16, 2006
- "Brittle Bone Disease, Bone Density and OI, or is it Child Abuse?" Presented at the Annual Southern Pediatric Endocrine Society Conference, Birmingham, Alabama, November 12, 2006
- "Broken Bones and Broken Families: Metabolic Disease and Unexplained Fractures in Infants and Children." EBMS Symposium (An evidence-based analysis of infant brain and skeletal injury). Oral Presentation, May 10 -12, 2007, Chicago, IL
- "Determinants of Fetal and Infant Bone Growth and Strength". EBMS Symposium (An evidence-based analysis of infant brain and skeletal injury). Oral Presentation, February 21-21, 2009, Denver, CO.

## **Committees**

1980-1992	Resident Evaluation Committee, University of Rochester.
1993- Present	IRB, Children's Medical Center (CMC), Dayton, OH.
1993- Present	Ohio Genetic Centers Directors Committee
1993- Present	Ohio State Newborn Screening Advisory Committee
	Ohio State Newborn Screening Laboratory
	Consultant Subcommittee
1994 -Present	Children's Medical Center Research Foundation Committee
1994 -Present	Radiation Safety Committee, CMC, Dayton, OH
1998 -2000	Appointments, Promotions and Continuances Committee, Wright State
	University Boonshoft School of Medicine (WSUBSOM).
1999- Present	Chairman, Appointments, Promotions and Continuances Committee,
	Department of Pediatrics (WSUBSOM).

## <u>Teaching</u>

#### 1980-1992 University of Rochester School of Medicine

Teaching medical genetics to medical students in formal course. Teaching clinical genetics to medical students and residents in clinical setting.

Teaching of general pediatrics as pediatric ward attending (2 months/year)

## 1992- Wright State University Boonshoft School of Medicine

Teaching medical genetics to medical students in formal course. Teaching clinical genetics to medical students and residents in clinical setting.

Teaching of general pediatrics as pediatric ward attending (1-4 weeks/year)