Linda M. Ernst, M.D., M.H.S.

March 2017

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ACADEMIC AFFILIATIONS

- 1991-1995 Instructor, Department of Pathology, University of Connecticut School of Medicine, Farmington, CT
- 2000-2003 Adjunct Assistant Professor, Department of Health Sciences, Quinnipiac University, Hamden, CT
- 2005-2008 Assistant Professor, Department of Pathology and Laboratory Medicine, University of Pennsylvania School of Medicine, Chicago, IL
- 2008-2013 Assistant Professor, Department of Pathology, Northwestern University Feinberg School of Medicine, Chicago, IL
- 2013-2017 Associate Professor, Department of Pathology, Northwestern University Feinberg School of Medicine, Chicago, IL

ACADEMIC TRAINING

- 1983-1987 B.S., Biology, University of Illinois, Urbana-Champaign, IL
- 1989-1991 M.H.S., Pathology, Quinnipiac College, Hamden, CT
- 1995-1999 M.D., University of Connecticut School of Medicine, Farmington, CT
- 1999-2002 Resident, Anatomic and Clincial Pathology, Yale University School of Medicine, New Haven, CT
- 2002-2003 Chief Resident, Anatomic and Clinical Pathology, Yale University School of Medicine, New Haven, CT
- 2003-2005 Fellow, Pediatric Pathology, The Children's Hospital of Philadelphia, Phildelphia, PA

BOARD CERTIFICATION AND LICENSURE

- 2004 Anatomic and Clinical Pathology, American Board of Pathology
- 2005 Pediatric Pathology, American Board of Pathology
- 2005-2009 Licensure, Commonwealth of Pennsylvania
- 2008-present Licensure, State of Illinois

SCHOLARSHIP

(a) Peer-reviewed publications in the primary literature, exclusive of abstracts:

1. Ernst LM, Salafia CM, Carter A: Intrauterine growth retardation in guinea pigs following uterine artery ligation: hepatic histology. Pediatr Pathol. 1993 Nov-Dec;13(6):763-772. PMID: 8108296.

2. Salafia CM, Ernst LM, Pezzulo JC, Wolf EJ, Rosenkrantz TS, Vintzileos AM: The very low birth weight infant: maternal complications leading to preterm birth, placental lesions, and intrauterine growth. Am J Perinatol. 1995 Mar;12(2):106-10. PMID: 7779189.

3. Cusick W, Salafia CM, Ernst L, Rodis JF, Campbell WA, Vintzileos AM: Low-dose aspirin therapy and placental pathology in women with poor pregnancy outcomes. Am J of Reprod Immunol. 1995 Sept;34(3):141-7. PMID: 8561870.

4. Sherer DM, Salafia CM, Minior VK, Sanders MM, Ernst L, Vintzileos AM: Placental basal plate myometrial fibers: clinical correlations of abnormally deep trophoblast invasion. Obstet Gynecol. 1996 Mar;87(3):444-9. PMID: 8598971.

5. Ernst LM, Sanders MM, Salafia CM, Carter AM: Cell populations in the bone marrow of guinea pig fetuses with intrauterine growth retardation. Pediatr Pathol and Lab Med. 1997 Jul-Aug;17(4):561-8. PMID: 9211548.

6. Ernst LM, Hui P, Parkash V: Intraplacental smooth muscle tumor; a case report. Intl J Gynecol Pathol. 2001 Jul;20(3):284-288. PMID: 11444205.

7. Ernst LM, Parkash V: Placental pathology in fetal Bartter syndrome. Pediatr Dev Pathol. 2002 Jan-Feb;5(1):76-9. PMID: 11815871.

8. Ernst LM, Rimm DL: Quantitative examination of the mechano-physical tumor cell enrichment of fine needle aspiration specimens. Cancer. 2002 Oct;96(5):275-279. PMID: 12378594.

9. Wang S, Ernst LM, Smith BR, Tallini G, Howe JG, Crouch J, Cooper DL: Systemic Tropheryma whippleii infection associated with monoclonal B-cell proliferation: a Helicobacter pylori-type pathogenesis? Arch of Pathol Lab Med. 2003 Dec;127(12):1619-22. PMID: 14632565.

10. Ernst LM, Crouch J, Rinder H, Howe JG: Bacterial etiology for chronic villitis is not supported by polymerase chain reaction for 16S rRNA DNA. Pediatr Dev Pathol. 2005 Nov-Dec;8(6):647-653. PMID: 16010482.

11. Salafia CM, Pezzullo JC, Charles AK, Ernst LM, Mass EM, Gross B, Pijenborg R: Morphometry of the basal plate superficial uteroplacental vasculature in normal mid-trimester and at term. Pediatr Dev Pathol. 2005 Nov-Dec;8(6):639-646. PMID: 16010484.

12. Ernst LM, Sondheimer N, Deardorff M, Bennett MJ Pawel B: The value of the metabolic autopsy in the pediatric hospital setting. J Pediatr. 2006 Jun;148(6):779-783. PMID: 16769386.

13. Brucker B, Meadows A, Ernst LM, Zedric S: A second leiomyosarcoma in the urinary bladder of a child with a history of retinoblastoma 12 years following partial cystectomy. Pediatr Blood Cancer. 2006 Jun;46(7):811-4. PMID: 16470582.

14. Badillo AT, Kreiger PA, Schmitz KR, Ernst LM, Kaiser LR, Leichty KW: Wilms tumor arising within a mediastinal teratoma. J of Pediatr Surg. 2006 Aug;41(8el-5.):el-5. PMID: 16863828.

15. Heltzer ML, Choi JK, Ochs HD, Sullivan KE, Torgerson TR, Ernst LM: A potential screening tool for IPEX syndrome. Pediatr Dev Pathol. 2007 Mar-Apr;10(2):98-105. PMID: 17378693.

16. Ernst LM, Quinn PD, Alawi F: Novel oral findings in Schimmelpenning syndrome. Am J of Med Genet A. 2007 Apr;143(8):881-3. PMID: 17366580.

17. Kreiger PA, Ernst LM, Elden L, Kazahya K, Alawi F, Russo P: Hamartomatous tongue lesions in children. Am J Surg Pathol. 2007 Aug;31(8):1186-1190. PMID: 17667541.

18. Ernst LM, Spinner NB, Piccoli DA, Mauger J, Russo P: Interlobular bile duct loss in pediatric cholestatic disease is associated with aberrant cytokeratin-7 expression by hepatocytes. Pediatr Dev Pathol. 2007 Sep-Oct;10(5):383-390. PMID: 17929991.

19. Simpson MA, Hsu R, Keir LS, Hao J, Sivapalan G, Ernst L, Zackai EH, Al Gazali LI, Hulskamp G, Kingston HM, Prescott TE, Ion A, Patton MA, Murday V, George A, Crosby AH: Mutation of FAM20C leads to lethal osteosclerotic bone dysplasia (Raine syndrome), highlighting a crucial molecule in bone development. Am J Hum Genet. 2007 Nov;81:906-912. PMCID: 2265657, PMID: 17924334.

20. Duesterhoeft SM, Ernst LM, Siebert JR, Kapur RP: Five cases of caudal regression with an aberrant abdominal umbilical artery: further support for a caudal regression-sirenomelia spectrum. Am J Med Genet A. 143(24):3175-84, December 2007. PMID: 17963219.

21. Feinstein JA, Ernst LM, Ganesh J, Feudtner C: What new information do pediatric autopsies provide? A retrospective evaluation of 100 consecutive autopsies using family-centered criteria. Arch Pediatr Adolesc Med. 2007 Dec;161(12):1190-1196. PMID: 18056565.

22. Hardy OT, Hernandez-Pampaloni M, Saffer JR, Scheuermann J, Ernst LM, Freifelder R, Zhuang H, MacMullen C, Alavi A, Becker S, Adzick NS, Divgi C, Stanley CA: Accuracy of [18F]-fluorodopa PET for diagnosing and localizing focal congenital hyperinsulinism. J Clin Endocrinol Metab. 2007 Dec;92(12):4706-4711. PMID: 1785314.

23. Magge SN, Chen HI, Stiefel MF, Ernst L, Cahill AM, Hurst R, Storm PB: Multiple ruptured cerebral aneurysms in a child with Takayasu arteritis. J Neurosurg Pediatr. 2008 Jan;1(1):83-7. PMID: 18352809.

24. Ernst LM, Grossman AB, Ruchelli ED: Familial Perinatal Liver Disease and Fetal Thrombotic Vasculopathy. Pediatr Dev Pathol. 2008 Mar-Apr;11(2):160-163. PMID: 17990937.

25. Srinivas SK, Ernst LM, Edlow AG, Elovitz MA: Can placental pathology explain second trimester pregnancy loss and subsequent pregnancy outcomes? Am J Obstet Gynecol. 2008 Oct;199(4):402.e1-5. PMID: 18928989.

26. Danzer E, Adzick NS, Rintoul NE, Zarnow DM, Schwartz ES, Melchionni J, Ernst LM, Flake AW, Sutton LN, Johnson MP: Intradural inclusion cysts following in utero closure of myelomeningocele: clinical implications and follow-up findings. J Neurosurg Pediatr 2008 Dec;2(6):406-13. PMID: 190356686.

27. Haas EJ, Ernst L: Picture of the month--quiz case. Arch Pediatr Adolesc Med. 2009 Jan;163(1):85. PMID: 19124708.

28. Ernst LM, Chou D, Parry S: Fetal Thrombotic Vasculopathy in Twin Placentas with Complete Hydatidiform Mole. Pediatr Dev Pathol. 2009 Jan-Feb;12(1):63-7. PMID: 18702565

29. Danzer E, Ernst LM, Rintoul NE, Johnson MP, Adzick NS, Flake AW: In utero meconium passage in fetuses and newborns with myelomeningocele. J Neurosurg Pediatr. 2009 Feb;3(2):141-6. PMID: 19278315.

30. Corao D, Biegel JA, Coffin CM, Barr FG, Wainwright LM, Ernst LM, Choi JK, Zhang PJ, Pawel B: ALK Expression in Rhabdomyosarcomas: Correlation with Histologic Subtype and Fusion Status. Pediatr Dev Pathol. 2009 Jul-Aug;12(4):275-83. PMID: 18788887

31. Purandare SM, Ernst L, Medne L, Huff D, Zackai EH: Developmental anomalies with features of disorganization (Ds) and amniotic band sequence (ABS): A report of four cases. Am J Med Genet A. 2009 Aug;149A:1740-1748. PMID: 19606475.

32. Hall EK, Glatz J, Kaplan P, Kaplan BS, Hellinger J, Ernst L, Gaynor JW: A case report of rapid progressive coarctation and severe middle aortic syndrome in an infant with Williams syndrome. Congenit Heart Dis. 2009 Sep;4(5):373-7. PMID: 19740193.

33. Conlin LK, Thiel BD, Bonnemann CG, Medne L, Ernst LM, Zackai E, Deardorff MA, Krantz ID, Hakonarson H, Spinner NB: Mechanisms of mosaicism, chimerism, and uniparental disomy identified by SNP array analysis. Hum Mol Genet. 2010, Apr 1;19(7):1263-75. PMCID: 3146011 PMID: 20053666.

34. Ernst LM, Gonzalez J, Ofori E, Elovitz M: Inflammation-Induced Preterm Birth in a Murine Model is Associated with Increases in Fetal Macrophages and Circulating Erythroid Precursors. Pediatr Dev Pathol. 2010 Jul-Aug;13(4):273-81. PMID: 19663449.

35. Khan R, Sander M, Ernst L, Egan J, Campbell W: Association between placental mineral deposition, villous architecture and fetal aneuploidy. J of Obstet Gynecol. 2010 Nov;30(8): 800-803. PMID: 21126116.

36. Pinney SE, Oliver-Krasinski J, Ernst L, Hughes N, Patel P, Stoffers DA, Russo P, De Leon DD: Neonatal diabetes and congenital malabsorptive diarrhea attributable to a novel mutation in the human neurogenin-3 gene coding sequence, J Clin Endocrinol Metab. 2011 Jul;96(7): 1960–1965, July 2011. PMCID: 3135203, PMID: 21490072.

37. Su EJ, Ernst L, Abdallah N, Chatterton R, Xin H, Monsivais D, Coon J, Bulun SE: Estrogen receptor-beta and fetoplacental endothelial prostanoid biosynthesis: A link to clinically demonstrated fetal growth restriction. J Clin Endocrinol Metab. 2011 Oct;96(10):E1558-67, Epub August 10, 2011. PMCID: 3200254, PMID: 21832119.

38. Schrier SA, Sherer I, Deardorff MA, Clark D, Audette L, Gillis L, Kline AD, Ernst L, Loomes K, Krantz ID, Jackson LG. Causes of death and autopsy findings in a large study cohort of individuals with Cornelia de Lange syndrome and review of the literature. Am J Med Genet A. 2011 Dec;155A(12):3007-24. Epub 2011 Nov 8. PMCID: 3222915, PMID: 22069164.

39. Huang M, Cham E, Eppes CS, Gerber S, Reed K, Ernst LM. Placental and fetal findings in intrauterine Candida lusitaniae infection following in vitro fertilization and embryo transfer. Pediatr Dev Pathol. 2012 Mar-Apr;15(2):127-31. PMID: 21864122.

40. Lo AA, Faye-Petersen OM, Ernst LM. Intrauterine Fetal Death of a Monochorionic Twin with Peripheral Pulmonary Infarcts: Potential Thromboembolic Events Following Death of Co-twin. Pediatr Dev Pathol. 2012 Mar-Apr;15(2):142-5. PMID: 22070756.

41. Mestan K, Matoba N, Arguelles L, Harvey C, Ernst LM, Farrow K, Wang X. Cord blood 8-isoprostane in the preterm infant. Early Hum Dev. 2012 Aug;88(8):683-9. PMCID: 3380152. PMID: 22425039.

42. Robinson BK, Su E, Grobman W, Huang M, Ernst LM. The association of placental inflammation with category II fetal heart tracings. Pediatr Dev Pathol. 2012 Jul-Aug;15(4):298-302, PMID: 22671990.

43. Carruth Griffin A, Strauss AW, Bennett, MJ, Ernst LM. Mutations in Long-Chain 3-Hydroxy-acyl-CoA Dehydrogenase are Associated with Placental Maternal Floor Infarction/Massive Perivillous Fibrin Deposition. Pediatr Dev Pathol. 2012 Sep-Oct;15(5):368-74. PMID: 22746996.

44. Ernst LM, Gawron LM, Fritsch MK. Pathologic examination of fetal and placental tissue obtained by dilation and evacuation. Arch Pathol Lab Med. 2013 Mar;137(3):326-37. PMID: 23451744.

45. Ernst LM, Minturn L, Huang MH, Curry E, Su EJ. Gross Patterns of Umbilical Cord Coiling: Correlations with Placental Histology and Stillbirth. Placenta 2013 Jul;34(7):583-8. PMID: 23642640.

46. Ernst LM, Grobman WA, Wolfe K, Huang MH, McDade TW, Holl JL, Borders AEB. Biological markers of stress in pregnancy: associations with chronic placental inflammation at delivery. Am J Perinatol. 2013 Aug;30(7):557-64. PMID: 23271381.

47. Gawron LM, Hammond C, Ernst LM. Perinatal Pathologic Examination of Non-Intact, Second Trimester Fetal Demise Specimens: The Value of Standardization. Arch Pathol Lab Med. 2013 Aug;137(8):1083-7. PMID: 23899064.

48. Linn RL, Kiley J, Minturn L, Fritsch MK, DeJulio T, Rostlund E, Ernst LM. Recurrent Massive Perivillous Fibrin Deposition in the Placenta Associated with Fetal Renal Tubular Dysgenesis: Case Report and Literature Review. Pediatr Dev Pathol. 2013 Sep-Oct;16(5):378-86. PMID: 23899317.

49. Faye-Petersen OM, Ernst LM. Maternal Floor Infarction and Massive Perivillous Fibrin Deposition. Surg Pathol Clin. 6 (2013) 101–114.

50. Weisman PS, Kashireddy PV, Ernst LM. Pathologic diagnosis of achondrogenesis type 2 in a fragmented fetus: Case report and differential diagnostic approach. Pediatr Dev Pathol. 2014 Jan-Feb; 17(1): 10-20. PMID: 24144387.

51. Faye-Petersen OM, Schauer G, Ernst LM, Williamson AK, Legallo R, Pacheco, C. Small Patients, Complex Challenging Cases - A Reappraisal of Professional Efforts in Perinatal Autopsies. Arch of Pathol Lab Med. 2014 Feb 3: 1-4. PMID: 24491223.

52. Voller SB, Chock S, Ernst LM, Su EJ, Xin L, Farrow KN, Mestan KK. Cord blood biomarkers of vascular endothelial growth (VEGF and sFIt-1) and postnatal growth: A preterm birth cohort study. Early Hum Dev. 2014 Apr;90(4):195-200 PMID: 24480606; PMCID: PMC4096942.

53. Mestan KK, Check J, Minturn L, Yallapragada S, Farrow KN, Liu X, Su E, Porta N, Gotteiner N, Ernst LM. Placental pathologic changes of maternal vascular underperfusion in bronchopulmonary dysplasia and pulmonary hypertension. Placenta. 2014 Aug;35(8):570-4. PMID: 24906549; PMCID: PMC4119480.

54. Su EJ, Xin H, Yin P, Dyson M, Coon J, Farrow KN, Mestan KK, Ernst LM. Impaired fetoplacental angiogenesis in growth-restricted fetuses with abnormal umbilical artery Doppler velocimetry is mediated by aryl hydrocarbon receptor nuclear translocator (ARNT). J Clin Endocrinol Metab. 2015 Jan;100(1):E30-40. PubMed PMID: 25343232; PMCID: PMC4283004.

55. Ernst LM. A Perinatologist's Perspective on the Perinatal Autopsy. Semin Perinatol. 2015 Feb;39(1):55-63: PMID: 25511296.

56. Linn RL, Minturn L, Yee LM, Maniar KP, Zhang Y, Fritsch MK, Kashireddy PV, Kapur RP, Ernst LM. Placental Mesenchymal Dysplasia without Fetal Development in a Twin Gestation: An Extreme in the Spectrum of Androgenetic Biparental Mosaicism. Pediatr Dev Pathol. 2015 Mar-Apr;18(2):146-54. PMID: 25625757.

57. Kashireddy P, Larson A, Minturn L, Ernst L. Case Report of Autopsy and Placental Examination After Radiofrequency Ablation of an Acardiac Twin. Lab Med. 2015 Summer;46(3):248-53. PMID: 26199267.

58. Ernst LM, Rand CM, Bao R, Andrade J, Linn RL, Minturn L, Zhang C, Kang W, Weese-Mayer DE. Stillbirth: Genome-wide copy number variation profiling in archived placental umbilical cord samples with pathologic and clinical correlation. Placenta 2015 Aug;36(8):783-9. PMID: 26094028.

59. Ernst LM. Placental Mesenchymal Dysplasia. J. Fetal Med. September 2015;2:127-133.

60. Battarbee AN, Palatnik A, Ernst LM, Grobman WA. Association of Isolated Single Umbilical Artery With Small for Gestational Age and Preterm Birth. Obstet Gynecol. 2015 Oct;126(4):760-4. PMID:26348181.

61. Linn RL, Miller ES, Lim G, Ernst LM. Adherent basal plate myometrial fibers in the delivered placenta as a risk factor for development of subsequent placenta accreta. Placenta. 2015 Dec; 36(12):1419-24. Epub 2015 Oct 19. PMID: 26494605.

62. Miller ES, Minturn L, Linn R, Weese-Mayer DE, Ernst LM. Stillbirth evaluation: a stepwise assessment of placental pathology and autopsy. Am J Obstet Gynecol. 2016 Jan; 214(1):115.e1-6. Epub 2015 Aug 28. PMID: 26319054.

63. Bertsch E, Minturn L, Gotteiner NL, Ernst LM. Absent Aortic Valve in DiGeorge Syndrome. Pediatr Dev Pathol. 2016 Jan-Feb;19(1):61-3. Epub 2015 Jul 31. PMID: 26230226.

64. Bhatti TR, Ganapathy K, Huppmann AR, Conlin L, Boodhansingh KE, MacMullen C, Becker S, Ernst LM, Adzick NS, Ruchelli ED, Ganguly A, Stanley CA. Histologic and

Molecular Profile of Pediatric Insulinomas: Evidence of a Paternal Parent-of-Origin Effect. J Clin Endocrinol Metab. 2016 Mar;101(3):914-22. PMID: 26756113; PMCID: PMC4803165.

65. Yallapragada SG, Mestan KK, Palac H, Porta N, Gotteiner N, Hamvas A, Grobman W, Ernst LM. Placental Villous Vascularity Is Decreased in Premature Infants with Bronchopulmonary Dysplasia-Associated Pulmonary Hypertension. Pediatr Dev Pathol. 2016 Mar-Apr;19(2):101-7. PMID: 26366786.

66. Ernst LM, Bit-Ivan EN, Miller ES, Minturn L, Bigio EH, Weese-Mayer DE. Stillbirth: Correlations Between Brain Injury and Placental Pathology. Pediatr Dev Pathol. 2016 May-Jun;19(3):237-43. PMID: 26492345.

67. Lim G, Horowitz JM, Berggruen S, Ernst LM, Linn RL, Hewlett B, Kim J, Chalifoux LA, McCarthy RJ. Correlation of probability scores of placenta accreta on magnetic resonance imaging with hemorrhagic morbidity. J Clin Anesth. 2016 Nov;34:261-9. PMID: 27687389.

68. Miller ES, Linn RL, Ernst LM. Does the presence of placental basal plate myometrial fibres increase the risk of subsequent morbidly adherent placenta: a case-control study. BJOG. 2016 Dec;123(13):2140-2145. PMID: 26265563.

69. Yallapragada SG, Mestan KK and Ernst LM, The Placenta as a Diagnostic Tool for the Neonatologist. NeoReviews 2016;17;e131.

(b) Peer-reviewed works in 'non-traditional' outlets:

None

(c) Peer-reviewed works accepted or in press

1. Ernst LM, Linn RL, Minturn L, Miller ES. Placental Pathologic Associations with Morbidly Adherent Placenta: Potential Insights into Pathogenesis. Pediatr Dev Pathol, [Epub ahead of print] July 21 2016. PubMed PMID: 27442784.

2. Mithal LB, Palac HL, Yogev R, Ernst LM, Mestan KK. Cord Blood Acute Phase Reactants Predict Early Onset Neonatal Sepsis in Preterm Infants. PLoS One. 2017 Jan 3;12(1):e0168677. PubMed PMID: 28045978; PubMed Central PMCID: PMC5207723.

3. Mestan KK, Gotteiner N, Porta N, Grobman W, Su EJ, Ernst LM. Cord Blood Biomarkers of Placental Maternal Vascular Underperfusion Predict Bronchopulmonary Dysplasia-Associated Pulmonary Hypertension. J Pediatr. 2017 Feb 2. pii: S0022-3476(17)30033-1. doi: 10.1016/j.jpeds.2017.01.015. [Epub ahead of print] PubMed PMID: 28162769.

4. Lewis N, Marszalek L, Ernst LM. Placental pathologic features in fetomaternal hemorrhage detected by flow cytometry. Pediatr Dev Pathol, accepted for publication Oct 2016.

5. Keenan-Devlin L, Ernst L, Ross K, Qadir S, Grobman W, Holl J, Crockett A, Miller G, Borders A. Maternal Income during Pregnancy is Associated with Chronic Placental Inflammation at Birth. Am J of Perinatol. Accepted for publication Feb 2017. (d) Non-peer-reviewed original articles None

<u>(e) Books:</u> As author: None

As editor:

1. Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011. 31 chapters, pp399.

(e) Book chapters:

1. Ernst LM, Chapter 1: Heart and blood vessels. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 3-18.

2. Ernst LM, Ruchelli ED, Huff DS, Chapter 11: Vas deferens. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 153-156.

3. Ernst LM, Ruchelli ED, Huff DS, Chapter 12: Seminal vesicle. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 157-161.

4. Ernst LM, Ruchelli ED, Huff DS, Chapter 13: Prostate gland. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 163-171.

5. Ernst LM, Chapter 18: Adrenal gland. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 201-212.

6. Ernst LM, Chapter 19: Thyroid gland. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 213-224.

7. Ernst LM, Chapter 20: Parathyroid gland. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 225-229.

8. Ernst LM, Chapter 21: Pituitary gland. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 231-238.

9. Ernst LM, Chapter 22: Thymus gland. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 241-250.

10. Ernst LM, Chapter 23: Spleen. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 251-260.

11. Ernst LM, Chapter 25: Palatine Tonsil. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 267-271.

12. Ernst LM, Chapter 28: Bone. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 323-336.

13. Ernst LM, Chapter 29: Skeletal muscle. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 337-344.

14. Ernst LM, Chapter 31: Placenta. In: Ernst LM, Ruchelli ED, Huff DS. Color Atlas of Human Fetal and Neonatal Histology, Philadelphia: Springer-Verlag, 2011, p 363-388.

15. Ernst L.M., and Faye-Petersen O.M. Miscellaneous Placental Pathology (Includes Massive Perivillous Fibrin Deposition, Fetal Thrombotic Vasculopathy, and Placenta Accreta). In: Linda M. McManus, Richard N. Mitchell, editors. Pathobiology of Human Disease. San Diego: Elsevier; 2014. p 2403-2422.

16. Ernst LM & Linn RL, Umbilical Cord Knots. In: Heerema-McKenney A, De Paepe, ME, Popek, EJ. Diagnostic Pathology: Placenta, Amyrsis 2015, p I1-10-13.

17. Ernst LM, Linn RL & Heerema-McKenney A, Umbilical Cord Edema and Thinning. In: Heerema-McKenney A, De Paepe, ME, Popek, EJ. Diagnostic Pathology: Placenta, Amyrsis 2015, p I1-14-17.

18. Ernst LM, Gross Evaluation and Normal Histology of Chorionic Plate. In: Heerema-McKenney A, De Paepe, ME, Popek, EJ. Diagnostic Pathology: Placenta, Amyrsis 2015, p I3-2-7.

19. Ernst LM, Massive Perivillous Fibrin Deposition and Maternal Floor Infarction. In: Heerema-McKenney A, De Paepe, ME, Popek, EJ. Diagnostic Pathology: Placenta, Amyrsis 2015, p II5-2-5.

20. Ernst LM, Large Vessel Fetal Vascular Occlusion. In: Heerema-McKenney A, De Paepe, ME, Popek, EJ. Diagnostic Pathology: Placenta, Amyrsis 2015, p II6-2-7.

21. Ernst LM, Distal Villous Lesions Associated With Fetal Vascular Occlusion. In: Heerema-McKenney A, De Paepe, ME, Popek, EJ. Diagnostic Pathology: Placenta, Amyrsis 2015, p II6-8-11.

22. Ernst LM, Placental Causes of Poor Fetal Growth. In: Heerema-McKenney A, De Paepe, ME, Popek, EJ. Diagnostic Pathology: Placenta, Amyrsis 2015, p III4-2-3.

(f) Other works that are publically available (websites, interviews, publications in the popular press, testimony, computer programs, protocols, reagents, inventions, patents not listed above, etc.)

None

(g) Clinical trials that are ongoing and unpublished None

(i) Works in review, in preparation, etc. not yet publically available [list ONLY if available for BSD review] None

FUNDING

<u>(a) Past:</u>

- 1. NIH 5RO1-DK56268-08 PI: Charles Stanley. My role: Pathology review. Title: 'Islet dysregulation in Infants with Congenital Hyperinsulinism". Annual direct costs \$401,426.00. Linda Ernst 5% effort through 8-2008. Project period 07/01/2006-06/30/2009.
- NICHD R43HD062307-01 PI: Carolyn M Salafia. My role: Consultant. Title: Placental Pathology: Digital Assessment and Validation, Total award \$125,815. Project period: 09/29/200–08/31/2010.
- 3. Friends of Prentice 650-5246000-60029995 PI: Linda M. Ernst. Project Title: "Stillbirth: Identification of Pathologic and Genetic Risk Factors". Total award \$98,830. Project period: 09/01/2011–08/30/2012.
- JIT 1R01HL119846-01A1 PI: Emily Su PI, My role: Tissue collection and examination. Title: "Mediators of impaired fetoplacental angiogenesis in fetal growth restriction". Total annual award: \$250,000. Linda Ernst 2.5% effort. Project period: 10/01/2014–02/01/2015.
- NIH/NICHD, HHSN275201300013C PI: Grobman, William. My role: Tissue collection. Title: The Asthma Cohort Support Contract, Linda Ernst, 2% effort. Project period 9/26/2013–1/5/2017.

(b) Current:

None

(c) Pending:

None

HONORS, PRIZES, AND AWARDS

1984	Alpha Lambda Delta Honor Society
1987	Golden Key Honor Society
1990	Quinnipiac College Outstanding Academic Achievement Award
2000	Halina Goldstein Award, outstanding performance on the autopsy service
2003	Gordon Vawter Award, Society for Pediatric Pathology
2010	Perinatal Pathology Award, runner up, Society for Pediatric Pathology
2015	Outstanding Teacher, Northwestern University Feinberg School of Medicine
2016	Outstanding Teacher, Northwestern University Feinberg School of Medicine

INVITED SPEAKING

April 2006 "Placental Pathology: What should a pathologist recognize?"

- Thomas Jefferson University, Anatomic Pathology, Philadelphia, PA June 2006 "Placental Pathology: What should the pathologists' assistant know?"
- Sep 2006 "Placental Pathologists Assistants Regional Conference, Lancaster, PA Sep 2006 "Placental pathology: Major Pathologic Processes Contributing to Stillbirth and Implications for Live births." University of Pennsylvania of Pennsylvania Department of Obstetrics and Gynecology Grand Rounds, Hospital of the University of Pennsylvania, Philadelphia, PA

Nov 2006	"Pediatric Autopsy: Major Pathology in Stillbirth and Neonatal Death", Hahnemann University Hospital/Drexel University College Of Medicine,
	Department of Pathology, Philadelphia, PA
Nov 2006	"Placental pathology: Three major pathologic processes",
	Hahnemann University Hospital/Drexel University College of Medicine,
	Department of Pathology, Philadelphia, PA
Dec 2006	"The importance of autopsy and placental examination in the investigation of
	pregnancy loss", March of Dimes sponsored conference: Investigating ways to
	improve pregnancy outcomes, Princeton, NJ
Feb 2007	"Placental Pathology in Mouse Model of Thrombophilia due to Factor V Leiden
	and High Levels of Factor IX", Children's Medical Center, Dallas, TX.
June 2007	"Placental Pathology in a Mouse Model of Thrombophilia", Children's Memorial
	Hospital Pathology Grand Rounds, Chicago, IL
Feb 2008	"Investigating the Pathologic Processes Contributing to Pregnancy Loss",
1002000	Hospital for Sick Children, Toronto, Canada
April 2008	"Localized Islet Cell Nuclear Enlargement in Congenital Hyperinsulinism:
April 2000	A Distinct Clinicopathologic Entity", Children's Hospital Boston, Boston, MA
April 2008	"Investigating the Placental Pathologic Processes Contributing to Pregnancy
April 2000	Loss", Brigham and Women's Hospital, Department of Pathology, Perinatal
	Division Research Rounds, Boston, MA
Sept 2009	"Pathologic Examination of the Placenta, Why bother?" Grand rounds,
Sept 2003	Department of Obstetrics and Gynecology, Prentice Women's Hospital, Chicago,
	IL
Feb 2010	"The Value of the Perinatal Autopsy in the Work-up of Genetic Disease",
1002010	Educational symposium for The Genetic Task Force of Illinois and the
	Illinois Department of Public Health, Prentice Women's Hospital, Chicago, IL
Feb 2011	"Placental Pathologic Correlations with Neonatal Outcome", Children's Memorial
1002011	Hospital, Pathology Grand Rounds, Chicago, IL.
March 2011	"Placental Pathologic Correlations with Neonatal Outcome", Northwestern
	University Feinberg School of Medicine, Pathology Grand Rounds, Chicago, IL
April 2011	"Placental Pathologic Correlations with Neonatal Outcome", Children's Hospital
	of Los Angeles, Pathology Grand Rounds, Los Angeles, CA.
March 2012	Pediatric Specialty Conference and expert panel discussion, USCAP annual
	meeting, Case presentation: "Massive perivillous fibrin deposition", Vancouver,
	BC, Canada.
June 2012	"Pathologic Evaluation of Stillbirth", Grand Rounds, Department of Obstetrics &
Julie 2012	Gynecology, Prentice Women's Hospital, Chicago, IL.
Sept 2014	Perinatal symposium on Skeletal Dysplasia, Presentation of "Diagnosis of
Sept 2014	Skeletal Dysplasia in Disrupted Fetuses", International joint meeting of the
	Society for Pediatric Pathology and Pediatric Pathology Society, Birmingham,
Nov 2014	England. "Evaluation of Stillbirth: A Perinatal Pathologist's Perspective", Penn State
100 2014	University, Pathology Grand Rounds, Hershey, PA.
Eab 2015	"Placental Pathology Associated with Perinatal Brain Injury", Nationwide
Feb 2015	
Sont 2015	Children's Hospital, Pathology Grand Rounds, Columbus, OH.
Sept 2015	"Evaluation of Stillbirth: A Perinatal Pathologist's Perspective", Chicagoland
	Perinatal Network Conference, Advocate Lutheran General Hospital, Park Ridge,
Nov 2015	IL. "Evaluation of Stillbirth: Constructing Magning from Dathology" Spatlight on
Nov 2015	"Evaluation of Stillbirth: Constructing Meaning from Pathology", Spotlight on
	Support: Constructing Support, Challenges of Perinatal Loss Conference, The

Alliance of Perinatal Bereavement Support Facilitators - Chicago Region and the University of Chicago Perinatal Center, University of Chicago, Chicago, IL "Evaluation of Stillbirth: Constructing Meaning from Pathology", Delnor Hospital March 2016 Continuing Education Seminar, Geneva, IL. "Evaluation of Stillbirth: A Perinatal Pathologist's Perspective" Department of Sept 2016 Pathology Northshore University Health System, Evanston, IL. Sept 2016 "The Placenta as Witness in Stillbirth", International Academy of Pathology, Symposium, Cologne, Germany. "Implications of hypoxia-induced vascular maldevelopment", International Sept 2016 Federation of Placenta Associations, Portland, OR. INVITED, ELECTED, OR APPOINTED EXTRAMURAL SERVICE 2005-2008 Finance committee member, Society for Pediatric Pathology Finance committee chair, Society for Pediatric Pathology 2008-2010 2008-2010 Council member. Society for Pediatric Pathology Development subcommittee chairperson, Society for Pediatric Pathology 2010-2014 2011-present Test Development and Advisory Committee, American Board of Pathology Development Subcommittee member, Society for Pediatric Pathology 2014-2016

- 2014-2016 Strategic Planning Committee member, Society for Pediatric Pathology
- 2014-2017 Counselor at Large/Board member, Society for Pediatric Pathology
- 2017-present Treasurer-Elect, Society for Pediatric Pathology
- 2008-2016 Editorial Board, Pediatric and Developmental Pathology
- 2016-present Associate editor, Pediatric and Developmental Pathology
- Various Manuscript reviewer for Pediatric and Developmental Pathology, Placenta, American Journal of Obstetrics and Gynecology, Human Pathology, Journal of Pediatric Hematology and Oncology, Experimental Lung Research, American Journal of Medical Genetics

PROFESSIONAL SOCIETIES

<u>Elected or invited membership:</u> None

Other:

United States and Canadian Academy of Pathology Society for Pediatric Pathology

EDUCATION

<u>The College (B.A., B.S.):</u> None

Graduate programs (M.S., Ph.D.):

2006-2008 Director of Clinical Site Rotations for Pathologists' Assistant students, Master of Health Science program Drexell University. The Children's Hospital of Philadelphia.

Pritzker School of Medicine (M.D.): None

- 2007-2008 General Pathology Laboratory Section Preceptor (8 labs) and Perinatal Pathology Lecturer, Mechanisms of Disease and Therapeutic Intervention, University of Pennsylvania School of Medicine
- 2009-2011 Team-Based Learning Preceptor and Perinatal Pathology Lecturer

Scientific Basis of Medicine course, Northwestern University Feinberg School of Medicine

2009-2017 Placental development and Placental pathology lectures (1-2 per year), Northwestern University Feinberg School of Medicine

Graduate medical education (residency and clinical fellowships):

(a) Didactic

- 2008-2017 3-8 resident lectures/unknown conferences per year, Northwestern Memorial Hospital
- (b) Clinical
 2005-2008 Teaching of residents and fellows in Surgical and Autopsy Pathology The Children's Hospital of Philadelphia, ~35 hours/month
- 2008-2017 Teaching of residents and fellows in Surgical and Autopsy Pathology, Northwestern Memorial Hospital, ~50 hours/month

Continuing medical education:

2015 2 lectures on Perinatal Pathology topics as part of "Perinatal Pathology" course, Chicago, IL

Other:

2010-2015 Infectious Disease Summer Academy, Perinatal infectious disease (yearly), Gross placental dissection laboratory, Young Women's Leadership Charter School of Chicago.

Research trainees:

(a) High school students and teachers None

- (b) Undergraduate (B.A., B.S.)
- 2010-2012 Michael Huang, undergraduate student, work-study program, Northwestern University
- 2012-2013 Bryan Huang, undergraduate student, work-study program, Northwestern University

(c) Medical (M.D.)

- 2006-2007 James A. Feinstein, 4th year Medical Student, University of Pennsylvania
- 2007-2008 Aqiba Bokhari, fellow Pediatric Pathology, The Children's Hospital of Philadelphia
- 2007-2009 Adrienne Carruth, Pathology resident, Hospital of the University of Pennsylvania, Oct 2009: Winner of Gordon Vawter award for best presentation by Pathologist in training
- 2013-2016 Rebecca L. Linn, Pathology resident, Northwestern University Oct 2013: Winner of Resident Recruitment Award for best review of an article relevant to Pediatric Pathology April 2014: Award for Outstanding Research Addressing Women's Health at the Tenth Annual Lewis Landsberg Research Day Sept 2014: Winner of the award for best presentation in Perinatal Pathology at the International joint meeting of the Society for Pediatric Pathology and Pediatric Pathology Society in Birmingham, England
- 2014-2015 Sushmita Yallapragada, Neonatology Fellow, Northwestern University
- 2014-2016 Natasha Lewis, Pathology resident, Northwestern University

April 2016: Award for Outstanding Research Addressing Women's Health at the Annual Lewis Landsberg Research Day

2015-2016 Lily Marsden, Pediatric Pathology fellow, Ann & Robert H. Lurie Children's Hospital of Chicago

(d) Graduate (Ph.D.) None

(e) Postdoctoral None

CLINICAL

2005-2008	Pediatric Pathologist, The Children's Hospital of Philadelphia
2008-2017	Director, Perinatal Pathology, Northwestern Memorial Hospital
2016-2017	Director, Autopsy Pathology, Northwestern Memorial Hospital
2017-present	Perinatal Pathologist, Northshore University Health Systems

SERVICE

Past Committee membership:

2009-2011	Clinical Specimen Release Committee, Northwestern Memorial Hospital
2010-2011	Information Technology Committee, Northwestern Memorial Hospital
2011-2013	Operations and Services Committee, Northwestern Memorial Hospital
2013-2015	NMHC Laboratory Utilization Committee, Northwestern Memorial Hospital
2014-2015	Residency Program Evaluation Committee, Northwestern Memorial Hospital
2014-2017	Clinical Competency Committee, Northwestern Memorial Hospital
2014-2017	Finance committee, AP revenue management subcommittee, Northwestern
	Memorial Hospital
2015-2017	Quality committee, Northwestern Memorial Hospital

Past leadership:

2008-2017	Director, Perinatal Pathology, Northwestern Memorial Hospital
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2016-2017 Director, Autopsy Pathology, Northwestern Memorial Hospital

Past other:

2010-2017	Interviewer of residency candidates
2014-2017	Clinical Competency Committee, Northwestern Memorial Hospital
2014-2015	Residency Program Evaluation Committee, Northwestern Memorial Hospital

NorthShore University HealthSystem

<u>Committee membership:</u> None

Leadership:

2017 Co-Director, Autopsy service

<u>Other:</u> None

Extramural (not indicated above) Leadership roles:

Feb 2006	Organizer, TriState Pediatric Pathology Society meeting
Aug 2006	Organizer, TriState Pediatric Pathology Society meeting
2006-2008	Organizer, Clinical Pathologic Correlation Conferences for Pediatric Grand
	Rounds, The Children's Hospital of Philadelphia
April 2015	Assistant Course Director, Perinatal Pathology (3 day) Course, Chicago, IL.
	Sponsored by Society for Pediatric Pathology

<u>Other:</u> None