

PUBLICATIONS

1. Hamilton E, Kimanani EK: [Intrapartum prediction of fetal status and assessment of labor progress](#). In: Balliere's Clinical Obstetrics and Gynecology, International Practice and Research, Analysis of Complex Data in Obstetrics, edited by M.S. Rogers and A.M.Z. Chang. Published by Balliere Tindall, London, Vol 8/Number 3, pp. 567-581, September 1994.
2. Hamilton E, Kimanani E, Pitman N, Brohan J, Ciampi A: An application of real time decision support in obstetrics. Proceedings of the International Conference on Neural Networks and Expert Systems in Medicine and Healthcare, (ed E.C. Ifeachor and K.G. Rosen) Plymouth, UK, Aug. 23-26, 1994, Part 3, Chapter 5, pp. 446-455.
3. Kramer MS, Coates AL, Michoud M-C, Dagenais S, Hamilton EF, Papageorgiou A: [Maternal anthropometry and idiopathic preterm labor](#). Obstetrics & Gynecology 1995;86(5) (Nov.): 744-748.
4. Kramer MS, Coates AL, Michoud M-C, Dagenais S, Moshonas D, Davis GM, Hamilton EF, Nuwayhid B, Joshi AK, Papageorgiou A, Usher RH: [Maternal asthma and idiopathic preterm labor](#). Am J Epidemiol, 1995 142 (10):1078-1088.
5. The Canadian Consensus on the use of Tocolytics for Preterm Labor. (Feb. 11-12/95 Toronto) Journal of SOGC 1995;17:1089-1115.
6. Hamilton EF, Platt RW, Morin L, Usher R, Kramer M: [How small is too small in a twin pregnancy?](#) Am J Obstet Gynecol, 1998; 179(3 Pt1), 682-685.
7. Hamilton EF, Bujold E, McNamara H et al: [Dystocia among women with symptomatic uterine rupture](#). Am J Obstet Gynecol, Mar 2001, 184(4):620-624.
8. Bujold E, Bujold C, Hamilton EF, Harel F, Gauthier RJ: [The Impact of A Single or Double Layer Closure On Uterine Rupture](#). Am J Obstet Gynecol 2002; Jun;186(6):1326-1330.
9. Liston R, Crane J, Hamilton E, Hughes O, Kuling S, MacKinnon C, McNamara H, Milne K, Richardson B, Trepanie MJ; Working Group on Fetal Health Surveillance in Labor, Executive and Council, Maternal-Fetal Medicine Committee, Clinical Practice Guideline Committee, and ALARM Committee, Society of Obstetricians and Gynecologists Canada; Canadian Medical Protection Association. [Fetal health surveillance in labor](#). J Obstet Gynecol Can. 2002 Mar;24(3):250-276.
10. Hamilton EF, Platt RW, Gauthier R, McNamara H, Miner L, Rothenberg S, Asselin G, Sabbah R, Benjamin A, Lake M, Vintzileos A: [The Effect of Computer-Assisted Evaluation of Labor on Cesarean Rates](#). J Healthcare Quality 2004;26:37-44.
11. Bujold E, Gauthier RJ, Hamilton E: [Maternal and perinatal outcomes associated with a trial of labor after prior cesarean delivery](#). J Midwifery Women's Health. 2005 Sep-Oct;50(5):363-364.

12. Warrick P, Hamilton E, Macieszczak M: [Neural network based detection of fetal heart rate patterns](#). In Neural Networks, 2005. Proceeding. 2005 IEEE International Joint Conference, vol 4, 2005, pp. 2400-2405.
13. Warrick P, Precup D, Hamilton EF, Kearney RE: [Fetal heart rate deceleration detection using a discrete cosine transform implementation of singular spectrum analysis](#). In The 5th International Workshop on Biosignal Interpretation. Proceedings, 2005, pp.151-154.
14. Warrick P, Precup D, Hamilton E, Kearney R: [Fetal heart rate deceleration detection from the discrete cosine transform spectrum](#). Conf Proc IEEE Eng Med Biol Soc. 2005;5:55551-8.
15. Warrick PA, Precup D, Hamilton EF, Kearney RE: [Fetal heart rate deceleration detection using a discrete cosine transform implementation of singular spectrum analysis](#). Methods Inf Med. 2007;46(2):196-201.
16. Bujold E, Gauthier RJ, Hamilton E: Maternal and perinatal outcomes associated with a trial of labor after prior cesarean delivery. J Midwifery Women's Health. 2005 Sep-Oct;50(5):363-364.
17. Warrick PA, Kearney RE, Precup D, Hamilton EF: [Linear models of intrapartum uterine pressure-fetal heart rate interaction for the normal and hypoxic fetus](#). Conf Proc IEEE Eng Med Biol Soc. 2006;1:6434-7.
18. Warrick PA, Kearney RE, Precup D, Hamilton EF: [System-identification noise suppression for intra-partum cardiotocography to discriminate normal and hypoxic fetuses](#). In Proceedings of Computers in Cardiology 2006.
19. Dyachenko A, Ciampi A, Fahey J, Mighty H, Oppenheimer L, Hamilton EF: [Prediction of risk for shoulder dystocia with neonatal injury](#). Am J Obstet Gynecol. 2006 Dec;195(6):1544-1549.
20. Hamilton E, Wright E: [Labor Pains: Unraveling the Complexity of OB Decision Making](#). Crit Care Nurs Q. 2006 Oct-Dec;29(4):342-353.
21. Lerner H, Hamilton E: [Shoulder Dystocia: What if you could see it coming?](#) Contemporary OB/GYN Nov 1, 2007.
22. Warrick PA, Kearney RE, Precup D, Hamilton EF: [Low-order parametric system identification for intrapartum uterine pressure-fetal heart rate interaction](#). Conf Proc IEEE Eng Med Biol Soc. 2007;2007:5043-5046.
23. Hamilton EF, Ciampi A, Dyachenko A, Lerner HM, Miner L, Sandmire HF: [Is Shoulder Dystocia with Brachial Plexus Injury Preventable?](#) Fetal and Maternal Medicine Review, 2008;19:(4)293-310.
24. Warrick PA, Kearney RE, Precup D, Hamilton EF: [Detecting the temporal extent of the impulse response function from intra-partum cardiotocography for normal and hypoxic fetuses](#). Conf Proc IEEE Eng Med Biol Soc. 2008;2008:2797-2799.

25. Warrick PA, Hamilton EF, Precup D, Kearney RE: [Identification of the Dynamic Relationship between Intrapartum Uterine Pressure and Fetal Heart Rate for Normal and Hypoxic Fetuses](#). Engineering IEEE Trans Biomed Eng 2009 Jun; 56(6):1587-97.
26. Elliott C, Warrick P, Graham E, Hamilton E: [Graded Classification of Fetal Heart Rate Tracings: Association with Neonatal Metabolic Acidosis and Neurologic Morbidity](#). Am J Obstet Gynecol. 2010 Mar;202(3):258.e1-8. Epub2009 Aug 29.
27. Parer JT, Hamilton EF: [Comparison of Five Experts in Computer Analysis in Rule-Based Fetal Heart Rate Interpretation](#). Am J Obstet Gynecol. 2010 Nov;203(5):451.e1-7. Epub 2010Jul 15.
28. Bujold E, Gyet M, Marcoux S, Brassard N, Cormier C, Hamilton E, Abdous B, Kinch R, Miner L, Masse A, Fortin C, Gagne G, Fortier F, Bastien G, Sabbah R, Guimond P, Roberge S, Gauthier R: [The role of uterine closure in the risk of uterine rupture](#). Obstet Gynecol. 2010 Jul;116(1):43-50.
29. Warrick PA, Hamilton EF, Precup D, Kearney RE: [Classification of Normal and Hypoxic Fetuses from Systems Modeling of Intrapartum Cardiotocography](#). Warrick IEEE Trans Biomed Engl. 2010 Apr;57(4):771-779.
30. Hamilton EF, Smith S, Yang L, Warrick P, Ciampi A: [Third- and fourth-degree perineal lacerations: defining high-risk clinical clusters](#). Am J Obstet Gynecol. 2011 Apr;204(4):309.e1-6. Epub 2011 Feb. 24.
31. Lerner HM, Durlacher K, Smith S, Hamilton EF: [Relationship Between Head-To-Body Delivery Interval in Shoulder Dystocia and Neonatal Depression](#). Obstet Gynecol. 2011 Aug;118(2 Pt 1):318-322.
32. Hamilton E, Warrick P, O'Keeffe D: Variable Decelerations: Do Size and Shape Matter? J Matern Fetal Neonatal Med. 2012 Jun25;(6):648-653.
33. Hamilton E, Smith S, Berry D, Ben-Yoseph O, O'Keeffe D, Knox GE: Revisiting the Perinatal Adverse Outcome Index. Patient Safety and Quality Health Care. 2011 May/June 22-7.
34. Warrick, Hamilton EF: Subspace detection of the impulse response function from Intra-partum cardiotocography. Conf Proc IEEE Eng Med Biol Soc. 2011;2011:5678-81.
35. Hamilton E, Warrick P, Knox E, O'Keeffe D, Garite T: [High uterine contraction rates in births with normal and abnormal umbilical artery gases](#). J Matern Fetal Neonatal Med. 2012 Nov;25(11):2302-7.
36. Daly MV, Bender C, Townsend KE, Hamilton EF: [Outcomes associated with a structured prenatal counseling program for shoulder dystocia with brachial plexus injury](#). Am J Obstet Gynecol. 2012 Aug;207(2):123.e1-5. doi: 10.1016/j.ajog.2012.05.023. Epub 2012 Jun 1
37. Hamilton EF, Warrick PA: [New perspectives in electronic fetal surveillance](#). J Perinat Med. 2013 Jan;41(1):83-92.

38. Smith S, Zacharias J, Lucas V, Warrick PA, Hamilton EF. [Clinical associations with uterine tachysystole](#). J Matern Fetal Neonatal Med. 2014 May;27(7):709-13.
39. Hamilton EF, Warrick PA, Collins K, Smith S, Garite TJ. [Assessing First Stage Labor Progression and Its Relationship to Complications](#). Am J Obstet Gynecol. 2015 Oct 15. doi: 10.1016/j.ajog.2015.10.016. [Epub ahead of print]
40. Hamilton EF, Simoneau G, Ciampi A, Warrick P, Collins K, Smith S, Garite TJ. [Descent of the Fetal Head \(Station\) During the First Stage of Labor](#). Am J Obstet Gynecol. 2015 Oct 13. pii: S0002-9378(15)01268-5. doi: 10.1016/j.ajog.2015.10.005. [Epub ahead of print]
41. Warrick PA, Hamilton EF, R. Kearney R, and Precup D. [A machine learning approach to the detection of fetal hypoxia during labor and delivery](#). AI Magazine, vol. 33, pp. 79–90, 2012.

Other Referred Conference Papers

Most of these papers are searchable using the search engine for engineering literature by the Institute of Electrical and Electronics Engineers called IEEE Xplore found at <http://ieeexplore.ieee.org/Xplore/home.jsp>

Full text versions of the papers from Computers in Cardiology are available at <http://cinc.org/archives.shtml>

42. P. A. Warrick and E. F. Hamilton, "Mutual information estimates of CTG synchronization," in Computing in Cardiology, vol. 42, 2015, pp. 137–139.
43. P. A. Warrick and E. F. Hamilton, "Discrimination of normal and at-risk populations from fetal heart rate variability," in Computing in Cardiology, 2014, pp. 1001–1004.
44. P. A. Warrick and E. F. Hamilton, "Subspace detection of the impulse response function from intrapartum uterine pressure and fetal heart rate variability," in Computing in Cardiology, 2013, pp. 417–420.
45. P. A. Warrick and E. F. Hamilton, "Fetal heart-rate variability response to uterine contractions during labour and delivery," in Computing in Cardiology, vol. 39, 2012, pp. 417–420.
46. P. A. Warrick, E. F. Hamilton, D. Precup, and R. E. Kearney, "A machine learning approach to the detection of fetal hypoxia during labor and delivery," in The Twenty-Second Innovative Applications of Artificial Intelligence Conference (IAAI), 2010.
47. P. A. Warrick, E. F. Hamilton, R. E. Kearney, and D. Precup, "Classification of normal and hypoxic fetuses using system identification from intra-partum cardiotocography," in ICML2008 Workshop on Machine Learning for Health Care Applications, 2008

48. P. A. Warrick, R. E. Kearney, D. Precup, and E. F. Hamilton, "System-identification noise suppression for intrapartum cardiotocography to discriminate normal and hypoxic fetuses," in *Computers in Cardiology 2006. Proceedings.*, vol. 33, 2006, pp. 937–940.
49. Warrick PA, Kearney RE, Precup D, Hamilton EF: Time progression of a parametric impulse response function from intra-partum cardiotocography for normal and hypoxic fetuses. *Computers in Cardiology. 2007;34:693-696.*
50. P. A. Warrick, D. Precup, E. F. Hamilton, and R. E. Kearney, "Fetal heart rate deceleration detection from the discrete cosine transform spectrum," in *Proceedings of the 2005 IEEE Engineering in Medicine and Biology 27th Annual Conference*, 2005, pp. 5555–5558.

Book Chapters

51. Warrick PA, Hamilton EF, Precup D, Kearney R: [Perinatal Hypoxic Brain Injury. Brain Hypoxia-Ischemia Research Progress](#) ed Oceane M. Roux, Nova Publishers New York. 2008, p. 257-269

Validation Abstract published by NICHD

Steven Weiner. [Independent validation of a fetal heart rate pattern recognition software](#)
American Journal of Obstetrics and Gynecology, Vol. 208, Issue 1, S316–S317
Published in issue: January 2013