

## Director – Edgar Armando Hernandez-Andrade, Ph.D.

### List of Publications

1. Thorgren-Jerneck K, Ley D, Hellstrom-Weston L, **Hernandez-Andrade E**, Lingman G, Ohlsson T, Oskarsson G, Pesonen E, Sandell A, Strand E, Werner O, Maršál K. Reduced postnatal cerebral glucose metabolism measured by PET after asphyxia in near term fetal lambs. *J Neurosci Res* 2001; 66: 44-50.
2. Brodsky J, **Hernandez-Andrade E**, Gudmundsson S, Dubiel M, Mandruzzato G, Laurini R, Maršál K. Can the degree of retrograde diastolic flow in abnormal umbilical artery flow velocity waveforms predict pregnancy outcome? *Ultrasound Obstet Gynecol* 2002; 19: 229-234.
3. **Hernandez-Andrade E**, Brodsky J, Lingman G, Gudmundsson S, Molin J, Maršál K. Uterine Artery Score and perinatal outcome. *Ultrasound Obstet Gynecol* 2002; 19: 438-442.
4. **Hernandez-Andrade E**, Guzman-Huerta M, Garcia-Cavazos R. Ahued-Ahued R. Prenatal diagnosis during the first trimester of pregnancy, whom and how? *Ginecol Obstet Mex.* 2002 Dec;70:607-12.
5. Jansson T, **Hernandez-Andrade E**, Lingman G, Maršál K. Evaluation of the fetal lung perfusion using power Doppler ultrasound. *Methodological Aspects. Ultrasound Med Biol* 2003; 29: 1551-1559.
6. **Hernandez-Andrade E**, Ahued-Ahued R. Transvaginal bleeding as a risk factor for Rhesus isoimmunization during pregnancy. *Salud Pub Mex* 2003; 45: 492-496.
7. Cicero S, Dezerega V, **Hernandez-Andrade E**, Scheier M, Nicolaidis KH. Learning curve for sonographic examinations of the fetal nasal bone at 11-14 weeks. *Ultrasound Obstet Gynecol* 2003; 22: 135-137.
8. Bottalico B, Larsson I, Brodzki J, **Hernandez-Andrade E**, Casslen B, Maršál K, Hansson S. Norepinephrine (NET), vesicular monoamine (VMAT2) and organic cation transporters (OCT1,2 and EMT) in human placenta from preeclamptic and normotensive pregnancies. *Placenta* 2004; 25: 518-29.
9. **Hernandez-Andrade E**, Jansson T, Ley D, Bellander M, Persson M, Lingman G, Maršál K. Validation of fractional moving blood volume measurement with power Doppler ultrasound in an experimental sheep model. *Ultrasound Obstet Gynecol* 2004; 23: 363-8.
10. **Hernandez-Andrade E**, Thuring-Jonsson A, Jansson T, Lingman G, Maršál K. Fractional moving blood volume estimation in the fetal lung using power Doppler ultrasound. A reproducibility study. *Ultrasound Obstet Gynecol* 2004; 23: 369-73.
11. Scheier M, **Hernandez-Andrade E**, Carmo A, Dezerega V, Nicolaidis KH. Prediction of fetal

anemia by measurement of middle cerebral artery peak systolic velocity. *Ultrasound Obstet Gynecol* 2004; 23: 432-6.

12. **Hernandez-Andrade E**, Scheier M, Dezerega V, Carmo A, Nicolaidis KH. Fetal middle cerebral artery peak systolic velocity in the investigation of non-immune hydrops. *Ultrasound Obstet Gynecol* 2004; 23: 442-5.
13. **Hernandez-Andrade E**, Thuring-Jönsson A, Jansson T, Lingman G, Maršál K. Lung fractional moving blood volume in normally grown and growth restricted fetuses. *Clin Physiol Funct Imaging* 2004; 24: 69-74.
14. Ley D, Oskarsson G, Bellander M, **Hernandez-Andrade E**, Lingman G, Maršál K, Olsson T, Pessonen E, Thorngren-Jerneck K, Werner O, Hellstrom-Westas L. Different responses of myocardial and cerebral blood flow to cord occlusion in exteriorized fetal sheep. *Pediatric Research* 2004; 55: 568-575.
15. **Hernandez-Andrade E**, Gerulewicz D, Villanueva-Díaz C, Sotelo A, Ahued-Ahued JR. Free amino acids in the amniotic fluid and maternal plasma in different periods of normal pregnancy. *Rev Invest Clin.* 2004 Nov-Dec;56(6):756-62.
16. **Hernández-Andrade E**, López-Tenorio J, Figueroa-Diesel H, Sanin-Blair J, Carreras E, Cabero L, Gratacós E. A modified myocardial performance (Tei) index for left fetal cardiac assessment based in the use of valve clicks improves reproducibility and inter-observer agreement. *Ultrasound Obstet Gynecol* 2005; 26: 227-32.
17. **Hernández-Andrade E**, Jansson T, Liuba K, Ley D, Lingman G, Maršál K. Perinatal adaptive response of the adrenal and carotid blood flow in sheep fetuses subjected to total cord occlusion. *J Matern Fetal Neonatal Med* 2005; 17: 101-9.
18. **Hernández-Andrade E**, Villanueva Díaz C, Ahued-Ahued J. Prolactin and growth hormone levels in the amniotic fluid and maternal serum during gestation. *Rev Inv Clin.* 2005; 57: 671-5.
19. Becker J, **Hernández-Andrade E**, Muñoz-Abellana B, Acosta R, Carreras E, Cabero L, Gratacós E. Stage-dependent fetal umbilical blood flow changes induced by laser therapy and amniodrainage in twin-to-twin transfusion syndrome. *Ultrasound Obstet Gynecol* 2006; 28: 674-80.
20. Scheier M, **Hernández-Andrade E**, Nicolaidis, Fonseca E, Nicolaidis KH. Prediction of fetal anemia in Rh disease after previous intrauterine transfusions by measurement of fetal middle cerebral artery peak systolic velocity. *Am J Obstet Gynecol* 2006;195: 1550-6.
21. Hansson SR, Chen Y, Brodzki J, Chen M, **Hernández-Andrade E**, Inman JM, Kozhich OA, Larsson I, Marsál K, Medstrand P, Xiang CC, Brownstein MJ. Gene expression profiling of human placentas from preeclamptic and normotensive pregnancies. *Mol Hum Reprod.* 2006;12:169-179.

22. **Hernández-Andrade E**, Jansson T, Marsál K. Fractional moving blood volume measurement using power Doppler ultrasound as an estimation of fetal organ blood perfusion. *Curr Med Imag Rev* 2006; 2: 365-72.
23. Medina-Castro N, Figueroa-Diesel H, **Hernández-Andrade E**. Normal reference values of the pulsatility index and peak systolic velocity in the fetal middle cerebral artery during normal pregnancy. *Ginecol Obstet Mex*. 2006 Jul;74(7):376-82.
24. Medina-Castro N, Figueroa-Diesel H, Guzman Huerta, **Hernández-Andrade E**. Normal reference Doppler values of the umbilical and uterine arteries during gestation. *Ginecol Obstet Mex*. 2006 Oct;74(10):509-15.
25. Gerulewicz D, Camero Y, Arias V, **Hernández-Andrade E**. High plasmatic androgen levels in women affected with pregnancy-induced hypertension. *Rev Invest Clin*. 2006 May-Jun;58(3):228-33.
26. **Hernández-Andrade E**, Figueroa-Diesel H, Kottman C, Illanes S, Arraztoa J, Acosta-Rojas R, Gratacós E. Gestational-age adjusted reference values of the modified myocardial performance index for evaluation of fetal left cardiac. *Ultrasound Obstet Gynecol*. 2007; 29: 321-5.
27. **Hernández-Andrade E**, Jansson T, Figueroa-Diesel H, Rangel H, Acosta-Rojas R, Gratacós E. Evaluation of fetal regional cerebral blood perfusion using power Doppler ultrasound and the estimate fractional moving blood volume. *Ultrasound Obstet Gynecol* 2007; 29: 556-61.
28. Gratacós E, Lewi L, Muñoz B, Acosta-Rojas R, **Hernandez-Andrade E**, Martinez JM, Carreras E, Deprest J. A classification system for selective intrauterine growth restriction in monochorionic pregnancies according to umbilical artery Doppler flow in the smaller twin. *Ultrasound Obstet Gynecol*. 2007; 30: 28-34.
29. Padilla-Gomes NF, Enríquez G, Acosta-Rojas R, Perapoch J, **Hernandez-Andrade E**, Gratacos E. Prevalence of neonatal ultrasound brain lesions in premature infants with and without intrauterine growth restriction. *Acta Paediatr*. 2007; 96: 1582-7.
30. Figueroa-Diesel H, **Hernandez-Andrade E**, Acosta-Rojas R, Cabero L, Gratacos E. Doppler changes in the main fetal brain arteries at different stages of hemodynamic adaptation in severe intrauterine growth restriction. *Ultrasound Obstet Gynecol*. 2007; 30: 297-302.
31. Medina Castro N, Moreno Alvarez O, Guzmán Huerta M, **Hernández Andrade E**. Physical principles, methodology, consistency, and safety in Doppler assessment of the fetal-placental circulation. *Ginecol Obstet Mex*. 2007 Oct;75(10):621-9.
32. Muñoz-Abellana B, **Hernandez-Andrade E**, Figueroa-Diesel H, Ferrer Q, Acosta-Rojas R, Cabero L, Gratacos E. Hypertrophic cardiomyopathy-like changes in monochorionic twin pregnancies with selective intrauterine growth restriction and intermittent absent/reversed end-diastolic flow in the umbilical artery. *Ultrasound Obstet Gynecol*. 2007; 30: 977-982.
33. Moreno-Alvarez O, **Hernandez-Andrade E**, Oros D, Jani J, Deprest J, Gratacos E. Association between intrapulmonary arterial Doppler parameters and degree of lung growth as measured by

lung-to-head ratio in fetuses with congenital diaphragmatic hernia. *Ultrasound Obstet Gynecol.* 2008;31:164-170.

34. Gratacós E, Antolin E, Lewi L, Martínez JM, **Hernandez-Andrade E**, Acosta-Rojas R, Enríquez G, Cabero L, Deprest J. Monochorionic twins with selective intrauterine growth restriction and intermittent absent or reversed end-diastolic flow (Type III): feasibility and perinatal outcome of fetoscopic placental laser coagulation. *Ultrasound Obstet Gynecol.* 2008; 31: 669-675.
35. **Hernandez-Andrade E**, Figueroa-Diesel H, Jansson T, Rangel-Nava H, Gratacos E. Changes in regional fetal cerebral blood flow perfusion in relation to hemodynamic deterioration in severely growth-restricted fetuses. *Ultrasound Obstet Gynecol.* 2008; 32: 71-76.
36. Figueras F, Fernández S, **Hernández-Andrade E**, Gratacós E. Umbilical venous blood flow measurement: accuracy and reproducibility. *Ultrasound Obstet Gynecol.* 2008; 32: 587-591.
37. Eixarch E, Meler E, Iraola A, Illa M, Crispi F, **Hernandez-Andrade E**, Gratacos E, Figueras F. Neurodevelopmental outcome in 2-year-old infants who were small-for-gestational age term fetuses with cerebral blood flow redistribution. *Ultrasound Obstet Gynecol.* 2008; 32: 894-899.
38. Crispi F, **Hernandez-Andrade E**, Pelsers MM, Plasencia W, Benavides-Serralde JA, Eixarch E, Le Noble F, Ahmed A, Glatz JF, Nicolaidis KH, Gratacos E. Cardiac dysfunction and cell damage across clinical stages of severity in growth-restricted fetuses. *Am J Obstet Gynecol.* 2008; 199: 254.e1-8.
39. Moreno R, Rosal M, Martinez I, Vilardell F, Gonzalez JR, Petriz J, **Hernandez-Andrade E**, Gratacós E, Aran JM. Restricted transgene persistence after lentiviral vector-mediated fetal gene transfer in the pregnant rabbit model. *J Gene Med.* 2008; 10: 951-964.
40. Figueroa-Diesel H, **Hernandez-Andrade E**, Benavides-Serralde A, Crispi F, Acosta-Rojas R, Cabero L, Gratacos E. Cerebral venous blood flow in growth restricted fetuses with an abnormal blood flow in the umbilical artery before 32 weeks of gestation. *Eur J Obstet Gynecol Reprod Biol.* 2008; 140: 201-205.
41. Eixarch E, Figueras F, **Hernández-Andrade E**, Crispi F, Nadal A, Torre I, Oliveira S, Gratacós E. An experimental model of fetal growth restriction based on selective ligation of uteroplacental vessels in the pregnant rabbit. *Fetal Diagn Ther.* 2009; 26: 203-11.
42. Figueras F, Oros D, Cruz-Martinez R, Padilla N, **Hernandez-Andrade E**, Botet F, Costas-Moragas C, Gratacos E. Neurobehavior in term, small-for-gestational age infants with normal placental function. *Pediatrics.* 2009; 124: e934-41.
43. Cruz-Martinez R, Moreno-Alvarez O, Prat J, Krauel L, Tarrado X, Castañón M, **Hernandez-Andrade E**, Albert A, Gratacos E. Lung tissue blood perfusion changes induced by in utero tracheal occlusion in a rabbit model of congenital diaphragmatic hernia. *Fetal Diagn Ther.* 2009; 26: 137-42.

44. Figueras F, Benavides A, Del Rio M, Crispi F, Eixarch E, Martinez JM, **Hernandez-Andrade E**, Gratacós E. Monitoring of fetuses with intrauterine growth restriction: longitudinal changes in ductus venosus and aortic isthmus flow. *Ultrasound Obstet Gynecol.* 2009; 33: 39-43.
45. Benavides-Serralde A, **Hernández-Andrade E**, Fernández-Delgado J, Plasencia W, Scheier M, Crispi F, Figueras F, Nicolaidis KH, Gratacós E. Three-dimensional sonographic calculation of the volume of intracranial structures in growth-restricted and appropriate-for-gestational age fetuses. *Ultrasound Obstet Gynecol.* 2009; 33: 530-7.
46. **Hernandez-Andrade E**, Crispi F, Benavides-Serralde JA, Plasencia W, Diesel HF, Eixarch E, Acosta-Rojas R, Figueras F, Nicolaidis K, Gratacós E. Contribution of the myocardial performance index and aortic isthmus blood flow index to predicting mortality in preterm growth-restricted fetuses. *Ultrasound Obstet Gynecol.* 2009; 34: 430-436.
47. Crispi F, Comas M, **Hernández-Andrade E**, Eixarch E, Gómez O, Figueras F, Gratacós E. Does pre-eclampsia influence fetal cardiovascular function in early-onset intrauterine growth restriction? *Ultrasound Obstet Gynecol.* 2009; 34: 660-5.
48. Padilla NF, Enriquez G, Jansson T, Gratacos E, **Hernandez-Andrade E**. Quantitative tissue echogenicity of the neonatal brain assessed by ultrasound imaging. *Ultrasound Med Biol.* 2009; 35: 1421-6.
49. Cruz-Martinez R, Figueras F, Oros D, Padilla N, Meler E, **Hernandez-Andrade E**, Gratacos E. Cerebral blood perfusion and neurobehavioral performance in full-term small-for-gestational-age fetuses. *Am J Obstet Gynecol.* 2009; 201: 474.e1-7.
50. Tintu A, Rouwet E, Verlohren S, Brinkmann J, Ahmad S, Crispi F, van Bilsen M, Carmeliet P, Staff AC, Tjwa M, Cetin I, Gratacos E, **Hernandez-Andrade E**, Hofstra L, Jacobs M, Lamers WH, Morano I, Safak E, Ahmed A, le Noble F. Hypoxia induces dilated cardiomyopathy in the chick embryo: mechanism, intervention, and long-term consequences. *PLoS One.* 2009; 4(4):e5155.
51. Medina Castro N, Figueroa Damián R, **Hernández Andrade E**. Evidence based medicine: diagnosis from a clinical epidemiology point of view. Basic concepts. *Ginecol Obstet Mex.* 2009; 77: 26-33.
52. Torres-Torres C, Pérez-Borbón G, Benavides-Serralde JA, Guzmán-Huerta ME, **Hernández-Andrade E**. Prevalence and complications of monochorionic diamniotic twin pregnancy. *Ginecol Obstet Mex.* 2010 Mar;78(3):181-6.
53. Cruz-Martinez R, Figueras F, **Hernandez-Andrade E**, Puerto B, Gratacós. Longitudinal brain perfusion changes in near-term small-for-gestational-age fetuses as measured by spectral Doppler indices or by fractional moving blood volume. *Am J Obstet Gynecol.* 2010 Jul;203(1):42.e1-6.
54. Cruz-Martinez R, Figueras F, Moreno-Alvarez O, Martinez JM, Gomez O, **Hernandez-Andrade E**, Gratacos E. Learning curve for the lung area to head circumference ratio measurement in

fetuses with congenital diaphragmatic hernia. *Ultrasound Obstet Gynecol.* 2010 Jul;36(1):32-6.

55. Oros D, Figueras F, Cruz-Martinez R, Padilla N, Meler E, **Hernandez-Andrade E**, Gratacos E. Middle versus anterior cerebral artery Doppler for the prediction of perinatal outcome and neonatal neurobehavior in term small-for-gestational-age fetuses with normal umbilical artery Doppler. *Ultrasound Obstet Gynecol.* 2010; 35: 456-61.
56. Cruz-Martinez R, Moreno-Alvarez O, **Hernandez-Andrade E**, Castañón M, Done E, Martinez JM, Puerto B, Deprest J, Gratacos E. Contribution of pulmonary Doppler to improve prediction of survival in fetuses with congenital diaphragmatic hernia treated with fetal endoscopic tracheal occlusion. *Ultrasound Obstet Gynecol.* 2010; 35:572-7.
57. Oros D, Figueras F, Cruz-Martinez R, Padilla N, Meler E, **Hernandez-Andrade E**, Gratacos E. Middle versus anterior cerebral artery Doppler for the prediction of perinatal outcome and neonatal neurobehavior in term small-for-gestational-age fetuses with normal umbilical artery Doppler. *Ultrasound Obstet Gynecol.* 2010; 35: 456-61.
58. Cruz-Martinez R, Moreno-Alvarez O, **Hernandez-Andrade E**, Castañón M, Done E, Martinez JM, Puerto B, Deprest J, Gratacos E. Contribution of pulmonary Doppler to improve prediction of survival in fetuses with congenital diaphragmatic hernia treated with fetal endoscopic tracheal occlusion. *Ultrasound Obstet Gynecol.* 2010; 35: 572-7.
59. Moreno-Alvarez O, Cruz-Martinez R, **Hernandez-Andrade E**, Done E, Gómez O, Deprest J, Gratacos E. Lung tissue perfusion in congenital diaphragmatic hernia and association with the lung to head ratio and intrapulmonary pulsed Doppler. *Ultrasound Obstet Gynecol.* 2010; 35: 578-82.
60. Cruz-Martinez R, Figueras F, Moreno-Alvarez O, Martinez JM, Gomez O, **Hernandez-Andrade E**, Gratacos E. Learning curve for the lung area to head circumference ratio measurement in fetuses with congenital diaphragmatic hernia. *Ultrasound Obstet Gynecol.* 2010 Jul;36(1):32-6.
61. Cruz-Martinez R, Figueras F, **Hernandez-Andrade E**, Puerto B, Gratacós. Longitudinal brain perfusion changes in near-term small-for-gestational-age fetuses as measured by spectral Doppler indices or by fractional moving blood volume. *Am J Obstet Gynecol.* 2010 Jul;203(1):42.e1-6.
62. Benavides-Serralde JA, **Hernández-Andrade E**, Figueroa-Diesel H, Oros D, Feria LA, Scheier M, Figueras F, Gratacós E. Reference values for Doppler parameters of the fetal anterior cerebral artery throughout gestation. *Gynecol Obstet Invest.* 2010; 69: 33-9.
63. Moreno-Alvarez O, Cruz-Martinez R, **Hernandez-Andrade E**, Done E, Gómez O, Deprest J, Gratacos E. Lung tissue perfusion in congenital diaphragmatic hernia and association with the lung to head ratio and intrapulmonary pulsed Doppler. *Ultrasound Obstet Gynecol.* 2010; 35:578-82.
64. Benavides-Serralde JA, **Hernández-Andrade E**, Figueroa-Diesel H, Oros D, Feria LA, Scheier M, Figueras F, Gratacós E. Reference values for Doppler parameters of the fetal anterior

cerebral artery throughout gestation. *Gynecol Obstet Invest.* 2010; 69:33-9.

65. Salomon LJ, Alfirevic Z, Berghella V, Bilardo C, **Hernandez-Andrade E**, Johnsen SL, Kalache K, Leung KY, Malinger G, Munoz H, Prefumo F, Toi A, Lee W; ISUOG Clinical Standards Committee. Practice guidelines for performance of the routine mid-trimester fetal ultrasound scan. *Ultrasound Obstet Gynecol.* 2011 Jan;37(1):116-26. ISSN 0960 7692
66. Cruz-Martinez R, **Hernandez-Andrade E**, Moreno-Alvarez O, Done E, Deprest J, Gratacos E. Prognostic Value of Pulmonary Doppler to Predict Response to Tracheal Occlusion in Fetuses with Congenital Diaphragmatic Hernia. *Fetal Diagn Ther.* 2011;29(1):18-24. ISSN 1015 3837
67. Cruz-Martínez R, Moreno-Alvarez O, **Hernández-Andrade E**, Castañón M, Martínez JM, Done E, Deprest J, Gratacós E. Changes in lung tissue perfusion in the prediction of survival in fetuses with congenital diaphragmatic hernia treated with fetal endoscopic tracheal occlusion. *Fetal Diagn Ther.* 2011;29(1):101-7. ISSN 1015 3837
68. **Hernández-Andrade E**, Benavides Serralde JA, Mancilla-Ramirez J. Social and economical factors influencing a fetal surgery program for complicated monochorionic twin pregnancies in an undeveloped country. *Fetal Diagn Ther.* 2011;29(3):224-8. ISSN 1015 3837
69. **Hernández-Andrade E**, Guzmán Huerta M, Benavides-Serralde JA, Páez-Serralde F, Camargo Marin L, Acevedo Gallegos S, Moreno Álvarez O, Mancilla Ramírez J. Laser ablation of the placental vascular anastomoses for the treatment of twin-to-twin transfusión syndrome. *Rev Invest Clin.* 2011 Jan-Feb;63(1):46-52. ISSN 0034-8376
70. Cruz-Martinez R, Figueras F, Jaramillo JJ, Meler E, Méndez A, **Hernandez-Andrade E**, Gratacos E. Learning curve for Doppler calculation of fetal modified myocardial performance index. *Ultrasound Obstet Gynecol.* 2011 Feb;37(2):158-62. ISSN 0960 7692
71. Cruz-Martinez R, Figueras F, **Hernandez-Andrade E**, Benavides-Serralde A, Gratacos E. Normal reference ranges of fetal regional cerebral blood perfusion using power Doppler ultrasound as measured by Fractional Moving Blood Volume. *Ultrasound Obstet Gynecol.* 2011 Feb;37(2):196-201. ISSN 0960 7692
72. Benavides-Serralde A, Scheier M, Cruz-Martinez R, Crispi F, Figueras F, Gratacos E, **Hernandez-Andrade E**. Changes in central and peripheral circulation in intrauterine growth-restricted fetuses at different stages of umbilical artery flow deterioration: new fetal cardiac and brain parameters. *Gynecol Obstet Invest.* 2011;71(4):274-80. ISSN 0378 7346
73. Cruz-Martínez R, Figueras F, **Hernandez-Andrade E**, Oros D, Gratacos E. Fetal brain Doppler to predict cesarean delivery for nonreassuring fetal status in term small-for-gestational-age fetuses. *Obstet Gynecol.* 2011 Mar;117(3):618-26. ISSN 0029 7844
74. Eixarch E, **Hernandez-Andrade E**, Crispi F, Illa M, Torre I, Figueras F, Gratacos E. Impact on fetal mortality and cardiovascular Doppler of selective ligation of uteroplacental vessels compared with undernutrition in a rabbit model of intrauterine growth restriction. *Placenta.* 2011 Apr;32(4):304-9. ISSN: 0143-4004

75. Ierullo, AM, Fernandez S, Palacio M, Gratacos E, **Hernandez-Andrade E**. Cervical blood perfusion assessed using power Doppler-derived estimation of fractional moving blood volume: a reproducibility study. *Ultrasound Obstet Gynecol*. 2011 Jul;38(1):57-61. ISSN 0960 7692
76. Cruz-Martinez R, Figueras F, Benavides-Serralde A, Crispi F, **Hernandez-Andrade E**, Gratacos E. Sequence of changes in myocardial performance index in relation to aortic isthmus and ductus venosus Doppler in fetuses with early-onset intrauterine growth restriction. *Ultrasound Obstet Gynecol*. 2011 Aug;38(2):179-84. ISSN 0960 7692
77. Benavides-Serralde A, **Hernandez-Andrade E**, Fernandez-Lara A, Figueras F, Moreno-Álvarez O, Camargo-Marín L, Acevedo-Gallegos S, Gallardo-Gaona J, Velázquez-Torres B, Guzmán-Huerta M. Accuracy of Different Equations for Estimating Fetal Weight. *Gynecol Obstet Invest* 2011; Oct 72:264-268. ISSN 0378 7346
78. Cruz-Martinez R, Figueras F, **Hernandez-Andrade E**, Oros D, Gratacos E. Changes in myocardial performance index and aortic isthmus and ductus venosus Doppler in term, small-for-gestational age fetuses with normal umbilical artery pulsatility index. *Ultrasound Obstet Gynecol*. 2011 Oct;38(4):400-5. ISSN 0960 7692
79. Cruz-Martínez R, Moreno-Alvarez O, **Hernández-Andrade E**, Castañón M, Martínez JM, Done E, Deprest J, Gratacós E. Changes in lung tissue perfusion in the prediction of survival in fetuses with congenital diaphragmatic hernia treated with fetal endoscopic tracheal occlusion. *Fetal Diagn Ther*. 2011;29(1):101-7.
80. **Hernandez-Andrade E**, Romero R, Ahn H, Hussein Y, Yeo L, Korzeniewski SJ, Chaiworapongsa T, Hassan SS. Transabdominal evaluation of uterine cervical length during pregnancy fails to identify a substantial number of women with a short cervix. *J Matern Fetal Neonatal Med*. 2012 Sep;25(9):1682-9. ISSN: 1476-4954
81. **Hernandez-Andrade E**, Benavides Serralde JA, Cruz-Martinez R. Can anomalies of fetal brain circulation be useful in the management of growth restricted fetuses? *Prenat Diagn*. 2012 Feb;32(2):103-12. ISSN 1097 0223
82. **Hernandez-Andrade E**, Benavides-Serralde JA, Cruz-Martinez R, Welsh A, Mancilla-Ramirez J. Evaluation of conventional Doppler fetal cardiac function parameters: e/a ratios, outflow tracts, and myocardial performance index. *Fetal Diagn Ther*. 2012;32(1-2):22-9. ISSN 1015 3837
83. Cruz-Martínez R, Figueras F, Bennasar M, García-Posadas R, Crispi F, **Hernández-Andrade E**, Gratacós E. Normal reference ranges from 11 to 41 weeks' gestation of fetal left modified myocardial performance index by conventional Doppler with the use of stringent criteria for delimitation of the time periods. *Fetal Diagn Ther*. 2012;32(1-2):79-86. ISSN 1015 3837
84. Figueroa H, Lozano M, Suazo C, Eixarch E, Illanes SE, Carreño JE, Villanueva S, **Hernández-Andrade E**, Gratacós E, Irarrazabal CE. Intrauterine growth restriction modifies the normal gene expression in kidney from rabbit fetuses. *Early Hum Dev*. 2012; 88 (11): 899-904
85. Figueroa H, Silva MC, Kottmann C, Viguera S, Valenzuela I, **Hernandez-Andrade E**, Gratacos E, Arraztoa JA, Illanes SE. Fetal evaluation of the modified-myocardial performance index in



pregnancies complicated by diabetes. *Prenat Diagn.* 2012; 32(10): 943-8 ISSN: 1097-0223

86. **Hernandez-Andrade E**, Hassan SS, Ahn H, Korzeniewski SJ, Yeo L, Chaiworapongsa T, Romero R. Evaluation of cervical stiffness during pregnancy using semiquantitative ultrasound elastography. *Ultrasound Obstet Gynecol.* 2013 Feb;41(2):152-61 ISSN 0960 7692
87. Hamill N, Romero R, Hassan S, Lee W, Myers SA, Mittal P, Kusanovic JP, Balasubramaniam M, Chaiworapongsa T, Vaisbuch E, Espinoza J, Gotsch F, Goncalves LF, Mazaki-Tovi S, Erez O, **Hernandez-Andrade E**, Yeo L. The fetal cardiovascular response to increased placental vascular impedance to flow determined with 4-dimensional ultrasound using spatiotemporal image correlation and virtual organ computer-aided analysis. *Am J Obstet Gynecol.* 2013 Feb;208(2):153.e1-153.e13.
88. Bhide A, Acharya G, Bilardo CM, Brezinka C, Cafici D, **Hernandez-Andrade E**, Kalache K, Kingdom J, Kiserud T, Lee W, Lees C, Leung KY, Malinger G, Mari G, Prefumo F, Sepulveda W, Trudinger B. ISUOG Practice Guidelines: use of Doppler ultrasonography in obstetrics. *Ultrasound Obstet Gynecol* 2013; 41: 233–239. ISSN 0960 7692
89. **Hernandez-Andrade E**, Stampalija T, Figueras F. Cerebral blood flow studies in the diagnosis and management of intrauterine growth restriction. *Curr Opin Obstet Gynecol.* 2013; 25: 138-144.
90. Chaiworapongsa T, Romero R, Korzeniewski SJ, Kusanovic JP, Soto E, Lam J, Dong Z, Than NG, Yeo L, **Hernandez-Andrade E**, Conde-Agudelo A, Hassan SS. Maternal plasma concentrations of angiogenic/antiangiogenic factors in the third trimester of pregnancy to identify the patient at risk for stillbirth at or near term and severe late preeclampsia. *Am J Obstet Gynecol.* 2013; 208(4): 287.e1-287.e15.
91. Thomason ME, Dassanayake MT, Shen S, Katkuri Y, Alexis M, Anderson AL, Yeo L, Mody S, **Hernandez-Andrade E**, Hassan SS, Studholme C, Jeong JW, Romero R. Cross-hemispheric functional connectivity in the human fetal brain. *Science Translational Medicine.* 2013; 20: 173ra24: 1-10.
92. **Hernandez-Andrade E**. Re: Childhood cognitive development after fetal growth restriction. E. Llurba, A. A. Baschat, O. M. Turan, J. Harding and L. M. McCowan. *Ultrasound Obstet Gynecol.* 2013; 41: 364-5. ISSN 0960 7692
93. Thuring A, Brännström KJ, Ewerlöf M, **Hernandez-Andrade E**, Ley D, Lingman G, Liuba K, Maršál K, Jansson T. Operator auditory perception and spectral quantification of umbilical artery Doppler ultrasound signals. *PLoS One.* 2013 May 20;8(5):e64033
94. Lam-Rachlin J, Romero R, Korzeniewski SJ, Schwartz AG, Chaemsaitong P, **Hernandez-Andrade E**, Dong Z, Yeo L, Hassan SS, Chaiworapongsa T. Infection and smoking are associated with decreased plasma concentration of the anti-aging protein,  $\alpha$ -klotho. *J Perinat Med* 2013 In press
95. Chaemsaitong P, Romero R, Korzeniewski SJ, Schwartz AG, Stampalija T, Dong Z, Yeo L, **Hernandez-Andrade E**, Hassan SS, Chaiworapongsa T. Soluble TRAIL in Normal Pregnancy and Acute Pyelonephritis: a Potential Explanation for the Susceptibility of Pregnant Women to Microbial Products and Infection. *J Matern Fetal Neonatal Med.* 2013 Mar 12. [Epub ahead of print)
96. Ahn H, **Hernandez-Andrade E**, Romero R, Patwardhan M, Goncalves LF, Auriolles A, Garcia M,

Hassan SS, Yeo L. Mirror artifacts in obstetric ultrasound: case presentation of a ghost twin during the second trimester ultrasound scan. *Fetal Diagnosis and Therapy* 2013. *In Press*

97. **Hernandez-Andrade E**, Ahn H, Szalai G, Korzeniewski SJ, Wang B, King M, Chaiworapongsa T, Than NG, Romero R. Evaluation of utero-placental and fetal hemodynamic parameters throughout gestation in pregnant mice using high frequency ultrasound. *Ultrasound in Medicine and Biology* 2013. *In Press*
98. **Hernandez-Andrade E**, Jansson T, Lingman G, Liuba K, Ley D, Maršál K. Blood flow streams in the fetal inferior vena cava: experimental animal study using ultrasound contrast agents. *Ultrasound Obstet Gynecol*. *In press*
99. Benavides-Serralde JA, **Hernandez-Andrade E**, Cruz-Martinez, Cruz-Lemini M, Scheier M, FiguerasF, Mancilla J, Gratacos E. Doppler evaluation of the posterior cerebral artery in normally grown and growth restricted fetuses. *Prenatal Diagnosis*. *In Press*