

Mara G. Coyle, M.D.

Women & Infants Hospital
 101 Dudley Street
 Providence, RI 02905
 Phone: (401) 274-1122 Ext 47437
 Business Fax Number: (401) 453-7571
 Electronic Mail Address: Mcoyle@wihri.org

EDUCATION

Undergraduate	1978-1982	Boston College, Boston, MA (BS Biology:) Summa Cum Laude, Phi Beta Kappa, National Dean's List, Order of the Cross, & Crown, Mendel Club Award of Distinction, Alpha Epsilon Delta Honor Society, Alpha Sigma Nu National Jesuit Honor Society
Medical School	1982-1984 1984-1986	Dartmouth/Brown Program in Medicine Brown University Program in Medicine, M.D.

POSTGRADUATE TRAINING

Internship:	1986-1987	Children's Hospital of Philadelphia (Pediatrics)
Residency:	1987-1989	Children's Hospital of Philadelphia (Pediatrics)
Fellowship:	1989-1992	Women & Infants Hospital of Rhode Island Neonatal-Perinatal Medicine

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

License	1986 - 1986 - 1992-inactive	Massachusetts State License #73325 Rhode Island State License #MD07862 California State License #G73450
Board Certification	1990 1997 2002 2010-2014 2014-2019 2019-2024	American Board of Pediatrics Neonatal-Perinatal Medicine Neonatal-Perinatal Medicine Recertification Neonatal-Perinatal Maintenance of Certification Neonatal-Perinatal Maintenance of Certification Neonatal-Perinatal Maintenance of Certification

ACADEMIC APPOINTMENTS

2014 - Professor of Pediatrics (Clinician Educator) Brown University
 2003-2014 Associate Professor of Pediatrics (Clinical) Brown University
 2002-2003 Assistant Professor of Pediatrics (Clinical) Brown University
 1995-2002 Clinical Assistant Professor of Pediatrics, Brown University
 1992-1994 Panel Physician California Children's Services
 1989-1992 Instructor of Pediatrics, Brown University
 1986-1989 Instructor of Pediatrics, University of PA School of Medicine

HOSPITAL APPOINTMENTS

2022- Director of Outpatient Clinical Operations, Women & Infants Hospital of Rhode Island
 2021- Pediatric Academic Review and Promotion Committee, Brown University, Providence, RI
 2019-2022 Resident Advisor, Pediatric Residency Hasbro Children's Hospital, Providence, RI
 2016- Medical Director Newborn Transport Service, Women & Infants Hospital of Rhode Island
 1995- Attending Neonatologist, Women & Infants Hospital of Rhode Island
 1995-2016 Director, Special Care Nursery, St. Luke's Hospital, New Bedford, MA
 1994-1995 Attending Neonatologist, California Critical Children's Care Medical Group
 1992-1994 Attending Neonatologist, Huntington Memorial Hospital, Pasadena CA

OTHER APPOINTMENTS

2023- Member, FDA mandated Pregnancy Registry Advisory Committee Pfizer Pharmaceuticals
 2022 Planning Committee, 5th Annual Rhode Island Substance Exposed Newborn Conference
 2020- Member, FDA mandated Pregnancy Registry Advisory Committee Biohaven Pharmaceuticals
 2020- Member, FDA mandated Pregnancy Registry Advisory Committee Harmony Bioscience
 2020- Pregnancy and Postpartum Death Review Committee, Rhode Island Department of Health
 2019 Scientific Reviewer March of Dimes
 2017-2018 Scientific Reviewer PCORI (Patient Centered Outcomes Research)
 2017 Advisory Council to Support the Interagency Task Force on Newborns with Neonatal Abstinence Syndrome with the MA Executive Office of Health and Human Services
 2016-2018 Key Advisor, Medical provider CME course on opioid use, misuse and addiction (Project Dove): NIDA funded pilot module
 2015- Member, Rhode Department of Health NAS Task Force
 2014-2019 GlaxoSmithKline Pharmaceuticals: provide expert review of large database on impact of major malformations on risk of hospitalization for common neonatal morbidities
 2012-2015 Expert Review Committee, PAC, Department of Public Health, Massachusetts (Review all nursery waiver data for licensure submitted to the DPH)
 2012- 2019 Member, FDA mandated Pregnancy Registry Advisory Committee: Cephalon/TEVA Pharmaceuticals (Review medical data of pregnant exposed patients and their newborns for safety and potential morbidities)
 2012- Member, Norman Prince Neurosciences Institute, Brown University
 2010-2013 Board of Directors Ashley Rising, Inc.
 2005-2016 Perinatal Advisory Committee (PAC) Department of Public Health (DPH), Massachusetts (Advise the Mass DPH regarding perinatal issues from all birth hospitals in the state)
 1997- Member, Section on Perinatal Pediatrics, American Academy of Pediatrics

1991- Fellow American Academy of Pediatrics
 1986-1989 Sigma XI The Scientific Research Society

HOSPITAL COMMITTEES

2023- Chair, Perinatal Mortality Committee, Women & Infants Hospital
 2021-2023 Search Committee, Chief of Pediatric Cardiology, Hasbro Children’s Hospital
 2021- Parent Advisory Council, Women & Infants Hospital
 2020- Clinical Competency Committee Neonatal Fellowship, Women & Infants Hospital
 2020- Continuing Medical Education Committee, Women & Infants Hospital
 2020 Created “Women & Infants Hospital Ventilator Allocation Guideline” during COVID
 Pandemic as Chair of Bioethics Committee 4/20/2020
 2018-2019 Search Committee, Chief of Pediatric Gastroenterology, Diversity Representative, HASBRO
 2014- 2015 Search Committee, Neonatal Position, Women & Infants/Charlton Hospital
 2010- Chair, Bioethics Committee, Women & Infants Hospital
 2010- Palliative Care Committee, Women & Infants Hospital
 2012-2016 Instructor, Med Teams Training, Women & Infants Hospital
 2008-2009 Search Committee, Neonatal Position, Women & Infants/St. Luke’s Hospitals
 2005-2007 Search Committee, Neonatal Position, Women & Infants Hospital
 2004-2005 Search Committee, Neonatal Position, Pawtucket Memorial Hospital
 2001-2002 Advisory Board, Vulnerable Infants Program of Rhode Island
 2001-2005 Current Concepts in Fetal & Neonatal Care Conference, Planning Committee,
 Women & Infants Hospital,
 1998-2017 Fellowship Program Sub-Committee, Women & Infants Hospital
 1999-2002 Neonatal – Perinatal Section Program Committee, AAP District One
 1999- Transport Task Force Committee, Women & Infants Hospital
 1999-2009 Member, Bioethics Committee, Women & Infants Hospital
 1999- Perinatal Mortality Committee, Women & Infants Hospital
 1997-2005 Perinatal Continuing Education Program, Women & Infants’ Hospital - Medical Director
 1993-1995 Credentials Committee, Huntington Memorial Hospital
 1995-2016 Chair, Perinatal Committee, St. Luke's Hospital
 1995-1998 Member, Continuous Quality Improvement, St. Luke's Hospital
 1997-2005 Perinatal Continuing Education Program, Women & Infants Hospital - Medical Director
 1995-2016 Member, Planning Committee for Annual Neonatal/Pediatric Conference: Concepts in
 Pediatrics, St. Luke’s Hospital

EDITORIAL REVIEWER

2011- Drug and Alcohol Dependence
 2007- JAMA
 2008- Archives of Diseases in Children
 2009- American Journal of Drug and Alcohol Abuse
 2010- Addiction
 2013- Research and Reports in Neonatology
 2017- British Medical Journal
 2017- Early Human Development
 2017- Pediatrics
 2018 American Journal of Obstetrics & Gynecology
 2019- Journal of Clinical and Translational Science
 2019- Journal of Pediatrics
 2019- Journal of Perinatology

2021- Pediatric Reports
2022- The Journal of Child Psychology and Psychiatry
2023- American Journal of Perinatology
2024- Translational Neuroscience

COMMUNITY SERVICE

2021 Plan of Safe Care Video for Rhode Island Department of Health, Department of Children Youth and Families, 10/14/21. <https://vimeo.com/skysabin/download/646625067/0a747b3b56>
[\[vimeo.com\]](https://vimeo.com)

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. **Coyle MG**, Oh W, Stonestreet BS. Effects of Indomethacin on Brain Blood Flow and Cerebral Metabolism in Hypoxic Newborn Piglets. *Am. J. Physiol.* 264: H141-149, 1993.
2. Odell RM, Doran RM, Erickson RC, Zeilinger TC, **Coyle MG**. Use of Pulse Oximetry to Monitor Venous Saturation during Extracorporeal Life Support. *Crit. Care Med.* 22(4): 626-32, 1994.
3. **Coyle MG**, Oh W, Petersson KH, Stonestreet BS. Effects of Indomethacin on Brain Blood Flow, Cerebral Metabolism, and Sagittal Sinus Prostanoids After Hypoxia. *Am. J. Physiol.* 269: H1450-H1459, 1995.
4. **Coyle MG**, Ferguson A, LaGasse L, Oh W, Lester B. Diluted Tincture of Opium (DTO) and Phenobarbital vs. DTO Alone for Neonatal Opiate Withdrawal in Term Infants. *J. Pediatr* 140: 561-4, 2002
5. **Coyle MG**, Ferguson A, LaGasse L, Liu E, Lester B. Neurobehavioral Effects of Treatment for Opiate Withdrawal. *Arch of Dis. Child Fetal Neonatal Ed.* 90(1): F73-F74, 2005
6. Jones,H.E., Martin, P.R., Heil, S.H., Stine, S.M., Kaltenbach,K., Selby, P., **Coyle, M.G.**, O'Grady, K.E., Arria, A.M., Fischer, G. Treatment of opioid-dependent pregnant women: clinical and research issues. *J of Subst Abuse Treat.*2008 Oct;35(3):245-59.
7. Martin, Peter R., Arria, Amelia M., Fisher, Gabriele, Kaltenbach, Karol, Heil, Sarah H., Stine, Susan M., **Coyle, Mara G.**, Selby, Peter and Jones, Hendree E. (2009) Psychopharmacologic Management of Opioid –Dependent Women during Pregnancy. *American Journal on Addictions*, 18:2,148-156.
8. Jones HE, Kaltenbach K, **Coyle, MG** et al. Re-building Lives: Helping women recover from opioid addiction during pregnancy. *Counselor: The Magazine for Addiction Professionals.* 2009:10-6-11.
9. Stine SM, Heil SM, Kaltenbach K, Martin PR, **Coyle MG**, Fisher G, Arria AM, Selby P, Jones HE Characteristics of Opioid-using pregnant women who accept of refuse participation in a clinical trial:screening results for the MOTHER study. *J of Drug and Alcohol Abuse.* 2009:Vol 35, issue 6, 429-433.
10. Jones HE, Heil SM, O'Grady KE, Martin PR, Kaltenbach K, **Coyle MG**, Stine SM, Selby P, Arria AM, Fisher G. Smoking in Pregnant Candidates for Opioid Agonist Medication Compared to Related and

Non-Pregnant Patient samples. *AJ Drug and Alcohol Abuse* 2009;35(5):375-380.

11. Benningfield MM, Arria AM, Kaltenbach K, Heil SM, Stein SM, **Coyle MG**, Selby P, Fisher G, Jones HE, Martin PR. Co-occurring psychiatric symptoms are associated with increased psychological, social and medical impairment in opioid dependent pregnant women. *Amer. J on Addict.* (2010) Sep-Oct 19(5):416-21.
12. Unger A, Martin PM, Kaltenbach K, Stine S, Heil S, Jones HE, Arria A, **Coyle M**, Selby P, Fisher G. Clinical characteristics of Central European and North American samples of pregnant women screened for opioid agonist treatment. *Eur Addict Res* 2010;16:99-107.
13. Heil, S.H., Jones, H.E., Arria, A., Kaltenbach, K., **Coyle, M.**, Fischer, G., Stine, S., Selby, P., & Martin, P. R. Unintended pregnancy in opioid-abusing women. *Journal of Substance Abuse Treatment.* 2011 March;40(2):199-202.
14. Jones HE, Kaltenbach K, Heil SH, Stine SM, **Coyle MG**, Arria AM, O'Grady KE, Selby P, Martin PR, Fischer G. Neonatal Abstinence Syndrome after Methadone or Buprenorphine Exposure. *N Engl J Med* 2010;2320-31.
15. Chisolm MS, Acquavita SP, Kaltenbach K, Winklbaaur B, Heil SH, Stine SM, **Coyle MG**, Leoutsakos JS, Tuten M, Jansson LM, Backer PM, Hones HE. Cigarette Smoking and Neonatal Outcomes in Depressed and Non-depressed Opioid-dependent Agonist-Maintained Pregnant Patients. *Addictive Disorders and Their Treatment.* 2011 Dec;10(4):180-187.
16. Benningfield MM, Dietrich MS, Jones HE, Kaltenbach K, Heil SH, Stine SM, **Coyle MG**, Arria AM, O'Grady KE, Fischer G, Martin PR. Opioid Dependence during Pregnancy: Relationships of Anxiety and Depression Symptoms to Treatment Outcomes. *Addiction.* 2012;107(suppl 1):74-82.
17. McNicholas L, Holbrook A, O'Grady KE, Jones HE, **Coyle MG**, Martin PR, Heil SH, Stine SM, Kaltenbach, K. Effect of Hepatitis C Virus status on liver enzymes in opioid dependent pregnant women maintained on opioid- agonist medication. *Addiction.* 2012;107(suppl 1): 91-97.
18. **Coyle MG**, Salisbury AL, Lester BM, Jones HE, Lin H, Graf-Rohrmeister K, Fisher G. Neonatal Neurobehavior Effects following Buprenorphine versus Methadone Exposure. *Addiction.*2012;107(suppl 1):63-73.
19. Holbrook A, Baxter JK, Jones HE, Heil SH, **Coyle MG**, Martin PR, Stine SM Kaltenbach K. Infections and Obstetrical outcomes in opioid-dependent pregnant women maintained on methadone or buprenorphine. *Addiction.* 2012;107(suppl 1):83-90.
20. Jones HE, Fischer G, Heil SH, Kaltenbach K, Martin PR, **Coyle MG**, Selby P, Stine SM, O' Grady KE, Arria AM. Maternal Opioid Treatment: Human Experimental Research (MOTHER) – Approaches, Issues, and Lessons Learned. *Addiction.* 2012;107(suppl 1):28-35.
21. Jones HE, Arria AM, Baewert A, Heil SH, Kaltenbach K, Martin PR, **Coyle MG**, Selby P, Stine SM, Fischer G. Buprenorphine Treatment of Opioid-Dependent Pregnant Women: A comprehensive review. *Addiction.*2012;107(suppl 1):5-27.

22. Kaltenbach K, Holbrook A, **Coyle MG**, Heil SH, Salisbury AL, Stine SM, Martin PR, Jones HE. Predicting Treatment for Neonatal Abstinence Syndrome in Infants Born to Women Maintained on Opioid Agonist Medication. *Addiction*. 2012;107(suppl 1):45-52.
23. Salisbury AL, **Coyle MG**, O'Grady KE, Heil SH, Martin PR, Stine SM, Kaltenbach K, Weninger M, Jones HE. Fetal Assessment before and after dosing with Buprenorphine or Methadone. *Addiction*. 2012;107(suppl 1):36-44.
24. Gaalema DE, Scott TL, Heil SH, **Coyle MG**, Kaltenbach K, Badger GJ, Arria A, Stine SM, Martin PR, Jones HE. Differences in the Profile of Neonatal Abstinence Syndrome Signs in Methadone- vs. Buprenorphine-exposed Neonates. *Addiction*. 2012;107(suppl 1):53-62.
25. Jones HE, Kaltenbach K, Heil SH, Stine SM, **Coyle MG**, Arria AM, O'Grady KE, Selby P, Martin PR, Jansson L, Fischer G. Intrauterine abstinence syndrome (IAS) during buprenorphine inductions and methadone tapers: can we assure the safety of the fetus? *J Matern Fetal Neonatal Med*. 2012 Feb 17.
26. Unger A, Jagsch R, Bawert A, Winklbaaur B, Rohrmeister K, Martin PR, **Coyle M**, Fischer G. Are male neonates more vulnerable to neonatal abstinence syndrome than female neonates? *Gend Med*. 2011 Dec 8(6):355-64.
27. Jones HE, Heil SH, Kaltenbach K, Stine SM, **Coyle MG**, Arria AM, O'Grady KE, Selby P, Martin PR. Comments on: Efficacy versus Effectiveness of Buprenorphine and Methadone Maintenance in Pregnancy. *J. Addictive Dis*. 2012;31:1-6.
28. Holbrook AM, Jones HE, Heil SH, Martin PR, Stine SM, Fischer G, **Coyle MG**, Kaltenbach K. Induction of pregnant women onto opioid-agonist maintenance medication: An analysis of withdrawal symptoms and study retention. *Drug and Alcohol Dep*. 2013 Sept 1;132(1-2):329-34.
29. **Coyle, MG**. Adjunctive therapy for neonatal opioid dependence: Do we really know what's best? *J Perinatol*. (2014) 34,574;doi:10.1038/jp.2014.95
30. Bier JB, Finger A, Bier BA, Johnson T, **Coyle MG**. Growth and Developmental Outcome of Infants with In-Utero Exposure to Methadone vs. Buprenorphine. *J Perinatol*; (2 April 2015) doi:10.1038/jp.2015.22
31. Lertsburapa TK, Vargas D, Lambert-Messerlian G, Tantravahi U, Gundogan F, DeLaMonte S, **Coyle MG**, De Paepe ME: Lethal hypoplasia and developmental anomalies of the lungs in a newborn with intrauterine adrenal hemorrhage and cerebral infarcts: A proposed pulmonary disruption sequence. *Pediatr Dev Pathol*.(2014);17(5):374-81.
32. Kaltenbach K, O'Grady KE, Heil SH, Salisbury AL, **Coyle MG**, Fischer G, Martin PR, Stine S, Jones HE: Prenatal Exposure to Methadone or Buprenorphine: Early Childhood Developmental Outcomes. *Drug and Alcohol Dep*.185(2018):40-49.

33. **Coyle, MG**, Brogly SB, Ahmed MS, Patrick SW, Jones HE: Neonatal Abstinence Syndrome. *Nat Rev Dis Primers.* (2018) 4:47 <https://doi.org/10.1038/s41572-018-0045-0>
34. Hardy JR, Pimenta JM, Pokras S, Sehdev H, St. Laurent S, Black L, **Coyle MG**. Risk of hospitalization for common neonatal morbidities in preterm and term infants: Assessing the impact of major congenital anomalies. *J Perinatology*; 8 Aug (2019) <https://doi.org/10.1038/s41372-019-0460-4>
35. **Coyle, MG**, Brogly SB, Ahmed MS, Patrick SW, Jones HE: Neonatal Abstinence Syndrome. *Nature Outlook Opioids Suppl to 12 September 2019*; 573(7773) [nature.com/349glib](https://www.nature.com/349glib)
36. Tindal EW, Willis M, Soto AR, **Coyle MG**, Herzlinger M, Luks FI, Renaud EJ. How Many Tests Does it Take? Optimizing the pre-operative workup for gastrostomy tube placement. *Nutrition in Clinical Practice*; April 2023; 38(2):434-441.. **DOI:** 10.1002/ncp.10949:.

OTHER NON-PEER REVIEWED PUBLICATIONS

1. Born Addicted, *The Standard Times*, New Bedford Massachusetts; 5/30/99
2. In the Shadows of Addiction, *The Standard Times*, New Bedford, Massachusetts; 5/19/2002
3. Baby Steps, *Brown Medicine Magazine*: Vol 22(3), Fall 2016
4. Women's health at all ages & stages, *Healthcare Purchasing News*: December 2022;46(12)
5. Cannabis Use in Pregnancy, Interview with Barbara Morse, Channel 10 News:7/12/2023
[Marijuana-use during pregnancy linked to long term health impacts for offspring. | WJAR \(turnto10.com\)](https://www.wjar.com/story/news/2023/07/12/cannabis-use-in-pregnancy-linked-to-long-term-health-impacts-for-offspring/)
6. Many States remove newborns when a mother is in recovery. RI is trying something different. *Providence Sunday Journal* 8/9/2023.
7. Fetal Fentanyl Exposure Syndrome Found in American Babies, Interview with Barbara Morse, Channel 10 News: 12/10/23 <https://turnto10.com/features/health-landing-page/potential-link-between-prenatal-fentanyl-exposure-and-novel-syndrome-december-11-rhode-island-southern-new-england#>

BOOKS AND BOOK CHAPTERS

1. **Coyle, Mara.** (2009) *Transitional Care of the Newborn in: Evidence Based Handbook of Neonatology*, William Oh ed. World Scientific.
2. Brown, William, **Coyle, Mara.** (2010) *Neonatal Neurology in Textbook of Clinical Pediatrics (2nd Ed.)*, Ay Elzouki ed. Springer Publishing.
3. **Coyle, Mara** (2010) *Miscellaneous Disorders in Textbook of Clinical Pediatrics (2nd Ed.)*, Ay Elzouki ed. Springer Publishing.

ABSTRACTS

1. **Coyle MG**, Oh W, Stonestreet BS. Effect of Indomethacin (I) on Brain Blood Flow (BBF) After

Hypoxia in Newborn Piglets. *Ped. Res.*, Vol. 31(4) Part 2. 199A, April 1992 Poster presented, Society for Pediatric Research Meeting, Baltimore.

2. **Coyle MG**, Oh W, Stonestreet BS. The Effect of Indomethacin Upon Cerebral Oxygen Consumption and Metabolism in Hypoxic Piglets. *Ped. Res.* 29(4) Part 2, 210A, April 1991 Platform Presentation, General Neonatology, Society for Pediatric Research Meeting 1991.
3. Gwiazdowski SG, Shah AR, Pane CR, **Coyle MG**, Kurth CD, Chance B, Delivoria-Popadopoulos M. Differential Regulation of Cerebral Oxygenation in Very Low Birth Weight vs. Low Birth Weight Infants. *Ped. Res.* 25(4), Part 2, 217A, April, 1989 Poster presented, Society for Pediatric Research Meeting 1989.
4. **Coyle MG**, Oh W, Stonestreet BS. Cerebral Oxygenation (CeO_2) in Very Low Birth Weight (VLBW) Infants in the First Twelve Hours of Life. *Ped. Res.* 29(4), Part 2, 209A, April 1991
5. **Coyle MG**, Oh W, Petersson KH, Stonestreet BS. The Effect of Indomethacin on 6-Keto- $F_{1\alpha}$ Prostaglandin and Thromboxane B_2 after Hypoxia in Newborn Piglets. *Ped. Res.*, 35(4), Part 2, 220A, April, 1994. Poster presented at the Society for Pediatric Research May 2-5 1994, Seattle, Washington.
6. Bier JB, Ferguson AE, Grenon D, Mullane E, **Coyle MG**. The Effect of Phenobarbital on Developmental Outcomes in Infants with Methadone Withdrawal: Results of a Randomized Trial. *Ped. Res.* 45(4), Part 2, 175A, April, 2000 Poster presented, Society for Pediatric Research Meeting 2000.
7. Ferguson AE, **Coyle MG**, LaGasse L, Liu E, Lester B. Neurobehavioral Effects of Treatment for Opiate Withdrawal. *Ped. Res.* 49(4), 18A, 2001 Poster Symposium, Society for Pediatric Research Meeting 2001
8. Gagnon R, Mullaney D, **Coyle MG**. Practice Patterns in Adherence to Neonatal Abstinence Guidelines: A Retrospective Chart Review. Poster Presentation Sigma Theta Tau International 44th Biennial Convention Indianapolis, IN October 2017.
9. Tindal EW, Willis M, Soto AR, **Coyle MG**, Herzlinger M, Luks FI, Renaud EJ. How Many Tests Does it Take? Optimizing the pre-operative workup for gastrostomy tube placement. Oral presentation ACS Quality and Safety Conference July 24-27, 2020
10. **Coyle MG**, Laptook A, Dansereau L, Bimali, M, Thombre V, Kiefer AS, Wong Ramsey K, Lester B, Development of a Neonatal Opioid Withdrawal Syndrome (NOWS) Severity Index. Poster presentation, Society for Pediatric Research Meeting April 2021. Phase 1. E-PAS2021:3537008.
11. Grady L, Molinaro G, Tucker R, **Coyle MG**, REST: Rapid Evaluation and Stabilization of the Tiny Infant: A Quality Improvement Initiative, Poster presentation, Society for Pediatric Research Meeting April 2022.
12. Grady L, Molinaro G, Tucker R, **Coyle MG**, REST: Rapid Evaluation and Stabilization of the Tiny Infant: A Quality Improvement Initiative, Oral presentation, New England Perinatal Society Meeting, Newport, RI, April 9, 2022.
13. Hensler E, Kozel OA, **Coyle MG**, Watson-Smith D, Renaud EJ, Perioperative transfusion and need

for type and crossmatch in stable neonatal intensive care unit patients, # 1522240; submitted American Academy of Pediatrics National Conference, Wash, DC Oct 20-24, 2023.

14. Hensler E, Kozel OA, Watson-Smith D, **Coyle MG**, Renaud EJ. "Perioperative transfusion and need for preoperative type and crossmatch in stable neonatal intensive care patients" ID:4095827; Oral Presentation, New England Surgical Society (NESS) 2024 Meeting, Burlington VT, Sept 20-22,2024.

INVITED PRESENTATIONS REGIONAL

1. "Near infrared spectroscopy studies in very low birth weight infants" Grand Rounds Presentation, Children's Hospital of Philadelphia, Philadelphia, PA, 5/31/89.
2. "The effect of low dose indomethacin on cerebral oxygenation and cerebral blood volume" NIH site visit presentation, Yale New Haven Hospital, New Haven, CT, 2/19/91.
3. "Neonatal resuscitation in the delivery room" Guest lecturer at "Current Concepts in Fetal and Neonatal Care," Newport, RI, 5/23/91.
4. "The effect of indomethacin and placebo on brain blood flow (BBF) and cerebral oxygen uptake (V O₂) in hypoxic piglets" Seventeenth Annual New England Conference on Perinatal Research, Chatham, MA, 10/8/91.
5. "Sepsis in the Neonate" Guest lecturer at "New Beginnings: Sepsis in the Neonate," Huntington Memorial Hospital, Pasadena, CA, 2/25/93
6. "Medical Care of the Neonate: New Therapies for Old Diseases" Guest lecturer at "From Hospital to Home: The Preterm Infant," Westport, MA, 10/17/96.
7. "The Preterm Infant" Guest lecturer at Women's Center Lecture Series, St. Luke's Hospital, New Bedford, MA, 10/24/96.
8. "Meconium Aspiration in the Newborn" Guest lecturer at "Southcoast Hospitals Group Third Annual Pediatric & Neonatology Conference: Concepts in Pediatrics", White's of Westport, Westport, MA, 10/1/98
9. "Neonatal Opiate Withdrawal" Morton Hospital, Taunton, MA, 12/8/98
10. "The Effects of Methadone on Mothers and Children" Guest Lecturer at "1999 Regional Perinatal Program", Women & Infants Hospital, Providence, RI, 4/14/98.
11. "When Should the Ambulance be Called: The Use of ECMO for the Treatment of Hypoxic Respiratory Failure" Perinatal Management Conference, Women & Infants Hospital, Providence, RI, 4/29/98.
12. "Doctor, Will my Child be Brain Damaged?" Perinatal Asphyxia: Its Impact on Outcome" Perinatal Management Conference, Women & Infants Hospital, Providence, RI, 12/2/98.

13. “The Effects of Opiates on the Newborn” Guest Lecturer at “High Point Drug Treatment Facility”, New Bedford, MA, 8/12/99
14. “The Effects of Opiates on the Newborn” Guest Lecturer at “Center for Health and Human Services”, New Bedford, MA, 10/29/99
15. “Preparing the Infant for Transport” Guest Lecturer at “Morton Hospital”, Taunton, MA, 11/9/99
16. “Do you really think he looks like the parents?” An Approach to the Dysmorphic Child Perinatal Management Conference, Women & Infants Hospital, Providence, RI 12/9/99
17. “New Approaches in the Management of Meconium” Guest Lecturer at Current Concepts in Fetal and Neonatal Care, The Rhode Island Convention Center, Providence, RI, 4/27/00
18. “Drug Treatment for Neonatal Opiate Withdrawal” Guest Lecturer at NIDA Site Visit, Women & Infants Hospital, Providence, RI, 7/13/00
19. “Birth Trauma: The Challenge to be Born Healthy” Guest Lecturer at “Southcoast Hospitals Group Fifth Annual Pediatric & Neonatology Conference: Concepts in Pediatrics”, White’s of Westport, Westport, MA, 10/5/00
20. “Intubation Techniques” Morton Hospital, Taunton, MA, 11/14/00
21. “Neonatal Opiate Withdrawal: New Treatment for an Old Disease” Grand Rounds, Pawtucket Memorial Hospital, Pawtucket, RI, 1/22/02
22. “Neonatal Opiate Withdrawal: New Treatment for an Old Disease” Charlton Memorial Hospital CME Lecture series, Fall River, MA, 1/31/03
23. “Nosocomial Infections: Why Won’t They Just Go Away?” Babies and Bugs: Women & Infants Hospital Annual Neonatal Conference, Providence, RI, 10/16/03
24. “Maternal Opioid Addiction: A New Therapy For an Old Disease” Pediatric Monthly Meeting, St. Luke’s Hospital, New Bedford MA, 4/8/05
25. “Maternal Opioid Addiction: A New Therapy for an Old Disease” Obstetrical Grand Rounds St. Luke’s Hospital, New Bedford MA, 5/16/05
26. “New Treatment Strategies for Maternal and Neonatal Opioid Addiction” Pediatric Grand Rounds Tobey Hospital, Wareham MA, 9/23/05
27. “Management of Neonatal Narcotic Withdrawal”, Fourth Annual Neonatal Conference Maternal Substance Abuse and the Withdrawing Neonate, Baystate Health Education Center, Springfield, MA, 10/24/07
28. “When is it Time to Pick up the Phone: Neonatal ECMO for the Treatment of Respiratory Failure” Neonatal Fellows Conference, Women & Infants Hospital, Providence, RI, 11/07
29. “Neonatal Abstinence Syndrome” Morton Hospital CME Lecture Series, Taunton MA, 10/30/08

30. “Transport Etiquette” Women & Infants Hospital Transport Lecture Series, Providence, RI, 12/3/08
31. “Maternal Opioid Addiction: Neonatal Management Strategies” Backus Hospital Perinatal Meeting, Norwich, CT, 10/29/09
32. “Guideline for Neonatal Management of Substance Withdrawal and Other Drug Effect” Backus Hospital Perinatal Meeting, Norwich, CT, 5/20/10
33. “SSRI Use in Pregnancy: How Safe is Safe?” Pawtucket Memorial Hospital Family Practice Grand Rounds, Pawtucket, RI, 6/10/10
34. “Neonatal Birth Trauma” Pawtucket Memorial Hospital Pediatric Grand Rounds, Pawtucket, RI, 10/27/10
35. “Do you really think he looks like the parents?” An Approach to the Dysmorphic Child Pawtucket Memorial Hospital Pediatric Grand Rounds, Pawtucket, RI, 11/17/10
36. “Results of the MOTHER Trial” St. Luke’s Hospital Perinatal Committee Meeting, New Bedford, MA, 2/11/11
37. “Maternal Opioid Addiction: Neonatal Treatment Strategies” Abbott Nutrition Guest Speaker for Cape Cod Pediatric and Obstetric Departments Daniel Webster Inn, Sandwich, MA, 3/1/11
38. “Maternal Opioid Addiction: Neonatal Treatment Strategies” Neonatal Update 2011: Overcoming Current and Common NICU Challenges Sponsored by: UMass Memorial Medical Center Doubletree Hotel Boston/Westborough, Westborough, MA, 6/8/11
39. “SSRI Use in Pregnancy: How Safe is Safe?” Baystate Children’s Hospital Resident Dinner Conference, Springfield, MA, 10/24/11
40. “Maternal Opioid Addiction and Neonatal Treatment Strategies: Its Not Just About Heroin Anymore” Pediatric Grand Rounds, Baystate Children’s Hospital, Springfield, MA, 10/25/11
41. “Management of Opioid Addiction in Pregnancy and the Newborn Period” Abbott Nutrition Guest Speaker; Amarante’s Sea Cliff, East Haven, CT, 3/15/12
42. “Maternal Opioid Addiction and Neonatal Treatment Strategies: It’s not just about Heroin Anymore” Issues in Perinatal and Neonatal Care, 35th Annual Seminar, Women & Infants Hospital Providence, RI, 4/26/12
43. “Maternal and Neonatal Opioid Dependence and Addiction” Pediatric Grand Rounds, Sturdy Hospital, Attleboro, MA, 5/16/12
44. “Can Babies Cope with a Mother on Dope?” Perinatal Management Conference, Women & Infants Hospital, Providence, RI 7/1/12.
45. “Can Babies Cope with a Mother on Dope?” Guest Speaker: 17th Annual Neonatology/Pediatric Conference, Hawthorne Country Club, New Bedford, MA, 11/7/12
46. “Effects of Opioid Dependence during Pregnancy and the Newborn Period” Abbott Nutrition Guest Speaker; The Candlewood Inn, Brookfield CT, 11/29/12

47. “Management of Opioid Dependence and Addiction during Pregnancy and the Newborn Period”
Abbott Nutrition Guest Speaker; Go Fish, Mystic CT, 2/27/13
48. “Maternal Opioid Dependence and Addiction in Pregnancy: It’s More than Just Heroin”
Abbott Nutrition guest Speaker; Eclisse, Stamford, CT, 3/7/13
49. “Opioid Dependence and Addiction in Pregnancy: How do We Treat the Neonate?”
Abbott Nutrition Guest Speaker; Max’s Tavern, Springfield, MA, 3/14/13
50. “Do Newborns Really Care what Drug their Mother Took?”
Neonatal Abstinence Syndrome Statewide Improvement Project; Westborough, MA, 6/13/13
51. “Management of the Opioid Dependent Mother and her Infant”
Pawtucket Resident Report, Pawtucket, RI, 7/2/14
52. “Is Breast Best? Breast Feeding and the Substance Exposed Newborn”
Annual AWHONN Conference; Women & Infants Hospital; Providence, RI, 10/6/14.
53. Prescription Opiates and Pregnancy; A Rhode Island Crisis for Mother & Baby
Women & Infants Hospital, Providence, RI, 2/23/2015.
54. “Management of Opioid Dependence in Pregnancy and during the Newborn Period”
Abbott Nutrition Guest Speaker, Anthony’s, New Haven, CT, 4/1/15.
55. “Opiate Use in Pregnancy and the Newborn Period”
Abbott Nutrition Guest Speaker, Ristorante Massimo, Portsmouth New Hampshire, 7/1/15.
56. “Practical Management of the Opioid Dependent Pregnant Gravida”
Joint Presentation, Obstetric Grand Rounds, Women & Infants Hospital, Providence, RI, 8/6/15
57. “Opiate Use in Pregnancy: Management Strategies for Mother and Infant”
Abbott Nutrition Guest Speaker, Springfield, MA, 9/23/15
58. “Collaborative & Compassionate Care for Maternal Substance Use and Substance Exposed
Newborns” Joint Presentation, Pediatric Flexible Discount Program; Perinatal Management
Conference, Women & Infants Hospital, Providence, RI, 11/4/15
59. “Management of Opioid Dependence and Addiction during Pregnancy: A Neonatologist View”
Webinar presentation, Center for Social Innovation, Massachusetts Dept of Public Health, Needham,
MA, 1/21/16
60. “Collaborative & Compassionate Care for Maternal Substance Use and Substance Exposed
Newborns” Joint Presentation, Pediatric Flexible Discount Program; Hasbro Children’s Hospital
Grand Rounds, Providence, RI, 3/4/16.
61. “Is Breast Best? Breastfeeding the Substance Exposed Newborn and the Challenges Faced Therein”
2016 National Association of Perinatal Social Workers Annual conference; Celebrating 40 Years,
Providence, RI, 5/5/16.

62. “Collaborative & Compassionate Care for Maternal Substance Use and Substance Exposed Newborns” Joint Presentation, Pediatric Flexible Discount Program; Women & Infants Hospital, Providence, RI 5/19/16.
63. “Opioid Use in Pregnancy: A Crisis of Epic Proportions” Women & the Escalating Opioid Crisis: What is happening and what the providers need to know”. 7th Annual Conference; Women's Health Council of RI; The Warren Alpert Medical School of Brown University, Providence, RI 11/3/16.
64. “Opioid Use in Pregnancy and the Newborn Period” Connecticut Children’s Medical Center, University of Connecticut, Hartford CT 11/21/16.
65. “Collaborative & Compassionate Care for Maternal Substance Use and Substance Exposed Newborns” Abbott Nutrition Guest Speaker, Spain Restaurant; Cranston RI 1/18/17.
66. “Collaborative & Compassionate Care for Maternal Substance Use and Substance Exposed Newborns” Abbott Nutrition Guest Speaker, Ristorante Massimo, Portsmouth NH, 2/21/17.
67. “Management of Opioid Dependence during Pregnancy and the Newborn Period” Abbott Nutrition Guest Speaker, South County Hospital, Wakefield, RI, 3/22/17.
68. “Management of Opioid Dependence in Pregnancy and During the Newborn Period” Abbott Nutrition Guest Speaker, Lynnfield, MA, 4/3/17.
69. “Working with Families of Substance Exposed Newborns” Rhode Island Department of Public Health Recovery Coach Training Program. Women & Infants Hospital, Providence RI; 4/11/17.
70. “Opioid Dependence in Pregnancy: What do Patients Need to Know?” OB Resident Simulation Program, Women & Infants Hospital, Providence, RI; 5/19/17.
71. “Management of Opioid Dependence in Pregnancy and during the Newborn Period” Abbott Nutrition Guest Speaker, Berkshire Medical Center, Pittsfield, MA, 6/1/17.
72. “Collaborative & Compassionate Care for Maternal Substance Use and Substance Exposed Newborns” Abbott Nutrition Guest Speaker, Baystate Hospital, Springfield, MA 6/1/17.
73. “Addressing Substance Exposed Infants and Pregnant and Parenting Women” Plenary Speaker, 48th Annual New England School of Addiction and Prevention Studies Summer School, Worcester, MA, 6/5/17.
74. “Compassionate Care for Maternal Substance Use and Substance Exposed Newborns” Neonatal Fellows Conference Women & Infants Hospital, Providence RI, 8/3/17.
75. “Management of Opioid Dependence in Pregnancy and During the Newborn Period” Abbott Nutrition Guest Speaker, Chop House, Manchester, NH, 8/10/17.
76. “Collaborative & Compassionate Care for Maternal Substance Use and Substance Exposed Newborns” Abbott Nutrition Guest Speaker, Gales Ferry Pediatrics, Gales Ferry, CT, 9/20/17.
77. “Opioid Use in Pregnancy: A Crisis of Epic Proportions” Service Collaboration to Address Supporting Prenatal Substance Use and Substance Exposed Newborns in RI; RI Department of

Health NAS Task Force; Rhode Island College, Providence, Rhode Island, 10/6/17.

78. “Collaborative & Compassionate Care for Maternal Substance Use and Substance Exposed Newborns” Sturdy Hospital Nursing Education Day, Attleboro, MA, 2/15/18.
79. “Management of Opioid Dependence in Pregnancy and During the Newborn Period” Abbott Nutrition Guest Speaker, Spain Restaurant, Cranston RI, 2/21/18.
80. “Management of Opioid Dependence in Pregnancy and During the Newborn Period” Abbott Nutrition Guest Speaker, Max Downtown, Hartford, CT. 2/22/18.
81. “Compassionate Care for Maternal Substance Use and Substance Exposed Newborns” Neonatal Fellows Conference Women & Infants Hospital, Providence RI, 7/25/18
82. “Care of the Pregnant Woman with Opioid Use Disorder and her Neonate” First Connections Conference, Save the Bay, Providence RI, 10/1/18
83. “Management of Opioid Dependence in Pregnancy and Resultant Newborn Outcomes” Maternal and Child Health Collaborative Office Rounds, Thundermist Health Center, Wakefield RI, 11/6/18
84. “Glutaric Acidemia Type 1 (GA 1)” MADAM Conference Women & Infants Hospital, Providence, RI, 1/2/2019
85. “Is Breast Best? Breastfeeding the Substance Exposed Newborn and the Challenges Faced Therein” Women & Infants Hospital Perinatal Management Conference, Providence, Rhode Island, 1/22/20
86. “Is Breast Best? Breastfeeding the Substance Exposed Newborn and the Challenges Faced Therein” Sturdy Memorial Hospital, Attleboro, MA, 3/27/20
87. “It’s 4:20 Somewhere: The Women & Infants Hospital Policy on Cannabis use in Pregnancy and Lactation” Women & Infants Hospital Obstetrics and Gynecology Grand Rounds, Providence, Rhode Island, 2/4/21.
88. “Working with Families of Substance Exposed Newborns” Rhode Island Department of Public Health Recovery Coach Training Program. Virtual presentation due to COVID, Providence RI; 5/21/21.
89. “Cannabis Use in Pregnancy and Lactation” Guest lecturer Rhode Island Department of Health Substance Exposed Newborn Taskforce, Providence Rhode Island; 10/12/21.
90. “Neonatal Transport: We’ve Come A Long Way Baby” Perinatal Conference, Women & Infants Hospital; 6/29/22.
91. Cannabis Use during Pregnancy and Lactation: Just because its Legal, Doesn’t Mean it’s Safe. 5th Annual Rhode Island Substance-Exposed Newborns Conference, Providence, Rhode Island; 12/13/22.
92. Cannabis Use During Pregnancy and Lactation: Emerging Issues Updates. 6th Annual Rhode Island Substance-Exposed Newborns Conference, Crowne Plaza, Warwick, Rhode Island, 12/12/23.

INVITED PRESENTATIONS

NATIONAL

1. “Care of the Newborn with Asphyxia” Guest lecturer at “Problems in Pediatrics”, Colby College, Waterville, ME, 7/14/98.
2. “Drug Abuse in the Mother-Effects in the Child” Guest lecturer at “Problems in Pediatrics”, Colby College, Waterville, ME, 7/17/98.
3. “Perinatal Asphyxia: It’s Impact on Outcome” Guest lecturer at “Fox Valley Perinatal Association 23rd Annual Perinatal Day 1998”, Theda Clark Medical Center, Neenah, WI, 11/11/98
4. “The Neonatal Addict: Opiate Use in the 90’s” Guest lecturer at “Fox Valley Perinatal Association 23rd Annual Perinatal Day 1998”, Theda Clark Medical Center, Neenah, WI, 11/11/98
5. “Maternal Opioid Addiction: A New Therapy for an Old Disease” Pharmacotherapy Research for the Treatment of In Utero Substance Exposed Neonates: Advances and Future Directions, NIDA Workshop, Rockville, MD, 3/8/07
6. “Maternal and Newborn Management of Opioid Dependence and Addiction”
Abbott Nutrition guest Speaker; Tek Nique, Bedford, NH, 10/9/13
7. “The Status of Maternal and Opioid Dependence in California”
Abbott Nutrition Guest Speaker; Naval Medical Center, San Diego, CA 3/20/14
8. “Maternal and Newborn Opioid Dependence and Addiction”
Abbott Nutrition Guest Speaker; Flemings Steak House, El Segundo, CA, 3/20/14
9. “Maternal and Newborn Opioid Dependence and Addiction”
Abbott Nutrition Guest Speaker, Children’s Hospital of Philadelphia, Philadelphia, PA, 10/14/14
10. “Maternal and Newborn Opioid Dependence and Addiction”
Abbott Nutrition Guest Speaker, Seasons 52, King of Prussia, PA, 10/14/14
11. “Management of Opioid Dependence and Addiction during Pregnancy and the Newborn Period”
Abbott Nutrition Guest Speaker, St. Christopher’s Hospital for Children, Philadelphia, PA, 10/15/14
12. “Collaborative & Compassionate Care for Maternal Substance Use and Substance Exposed Newborns” Abbott Nutrition Guest Speaker, Century Manor Grillhouse, Olean, NY, 5/10/17.
13. “Collaborative & Compassionate Care for Maternal Substance Use and Substance Exposed Newborns” Abbott Nutrition Guest Speaker, Queensbury Hotel, Glens Falls, NY, 7/21/17.
14. “Management of Opioid Dependence in Pregnancy and During the Newborn Period” Abbott Nutrition Guest Speaker, Flemings Prime Steakhouse, El Segundo, CA, 1/24/18.
15. “Management of Opioid Dependence in Pregnancy and During the Newborn Period” Abbott Nutrition Guest Speaker, Ruths Chris Steak House, Los Angeles, CA, 1/25/18.
16. “Addressing Substance Exposed Infants and Pregnant Women” Webinar Presentation, Abbott Nutrition Guest Speaker, Cedars-Sinai Hospital, Los Angeles, Ca, 4/11/18.

17. “Opioid Dependence in Pregnancy and During the Newborn Period” Abbott Nutrition Guest Speaker, Maggiano’s Little Italy, King of Prussia, PA, 4/25/18
18. “Collaborative and Compassionate Care for the Opioid-Exposed Mother Infant Dyad” Grand Rounds Goryeb Children’s Hospital, Morristown New Jersey, 5/9/2019.
19. “Management of the Opioid Exposed Mother-Infant Dyad in Pregnancy” The Maria-Delivoria Papadopoulos, MD “A Day with the Newborn Symposium”, presented virtually due to COVID, 1/28/22.
20. Cannabis Use during Pregnancy and Lactation: Just because its Legal, Doesn’t Mean it’s Safe. Maine’s 2023 Nurture ME Summit, Building Family Engagement, and Preventing Substance Exposed Pregnancies, presented in Zoom format 1/10/2024.

COMPLETED GRANT AWARDS

Co-Principal Investigator- Ferguson A, Coyle, MG. “The Optimal Treatment Strategy for Neonatal/Opiate Withdrawal.” \$20,000 awarded from the John Alden Trust, 1999.

Co-Investigator-Lester B, Coyle MG.(supplement) National Institute on Drug Abuse. Methadone and Buprenorphine: Ante- and Post-Partum, December 2000-November 2003. (\$171,570 awarded)

Co-Investigator -Lester B, Coyle MG, MOTHER (R01DA015778), Maternal Opioid Treatment: Human Experimental Research. Multi-center trial, September 2004-June 2009 (\$1,493,863 awarded).

COLLABORATION

Renaud E, Hensler E, Coyle M, Association of intraoperative hypothermia with post-operative complications in pediatric patients. Research study in collaboration with Lifespan and W&I. 2021-

Renaud E, Hensler E, Coyle M, Preoperative Type and Cross in stable NICU patients: is it necessary? Research study in collaboration with Lifespan and W&I 2021.

Renaud E, Hensler E, Coyle M, Association of intraoperative hypothermia with post-operative complications in pediatric patients Research study in collaboration with Lifespan and W&I 2021.

HOSPITAL TEACHING ADVISING MENTORING ROLES

Mentees:

1. Robyn Gagnon, NNP: Research study for doctorate degree: Practice Patterns in Adherence to Neonatal Abstinence Guidelines: Retrospective Chart Review. (6/16-2/17) Poster Presentation Sigma Theta Tau International’s 44th Biennial Convention, Indianapolis, In, 10/28/17.
2. Stephanie Curtis, NNP: Research study for doctorate degree: Low Lactose Traditional Formula for Management of Gastrointestinal Symptoms in Newborns with Opioid Withdrawal (11/18-20)
3. Giulia Molinaro,MD REST QI project: Rapid Evaluation and Stabilization of the Tiny Infant (2019-2022)
Lisa Grady,MD
4. Anna Sagaser MD, Melanie Duran MD, Stephanie Brule MD QI Project: Holding During Hypothermia (2023-)

Residency Advisees:

1. Claire Moore 2019-2022
2. Cassie Drees 2019-2022
3. Laura Chaviaro Chong 2019-2022

PEDIATRIC THIRD YEAR MEDICAL STUDENT CLERKSHIP

1995 -2020 Day in NICU twice monthly when on service

PEDIATRIC RESIDENCY CURRICULUM

Resident Lecture Series multiple times throughout the year

Educate residents on effects of opioid dependence for pregnant women and their infants as well as fluid management for preterm infants

Intern Bootcamp/Orientation

FELLOWS CONFERENCE

Transport Topics discussed 3-4 times annually; Annual fellow Transport Simulation

PERINATAL MANAGEMENT CONFERENCE

Present topic of choice every 1-2 years