

## MCH Attachments

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## References

- (2018). "Kentucky Helping to Engage and Achieve Long Term Health (HEALTH) Section 1115 Medicaid Waiver Fact Sheet." Retrieved 07/09/2018, from <https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ky/ky-health-fs.pdf>.
- (2018). "Shaping Our Appalachian Region (SOAR)." Retrieved 04/22/2018. Appalachian Regional Commission. (2018). "Appalachian Regional Commission, County Economic Status in Appalachia, FY2018." Retrieved 04/22/2018.
- Center for Disease Control (CDC). (2016). "Kentucky State Nutrition, Physical Activity, and Obesity Profile." Retrieved 07/09/2018, from <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/profiles/pdfs/kentucky-state-profile.pdf>.
- Deloitte Development LLC. (2015). "Commonwealth of Kentucky Medicaid Expansion Report." 04/09/2018, from [https://jointhehealthjourney.com/images/uploads/channel-files/Kentucky\\_Medicaid\\_Expansion\\_One-Year\\_Study\\_FINAL.pdf](https://jointhehealthjourney.com/images/uploads/channel-files/Kentucky_Medicaid_Expansion_One-Year_Study_FINAL.pdf).
- Health Insurance.org. (2018). "Kentucky and the ACA's Medicaid Expansion." Retrieved 04/09/2018, from <https://www.healthinsurance.org/kentucky-medicaid>.
- Healthy People 2020. "Disparities." Retrieved 04/22/2018, from <https://www.healthypeople.gov/2020/about/foundation-health-measures/disparities>.
- National Highway Traffic Safety Administration Center for Statistics and Analysis. (2017). "Traffic Safety Facts 2016 Data." Retrieved 07/01/2018, from <file:///C:/Users/janice.bright/Downloads/2016%20CHILDREN%20Traffic%20Safety%20Fact%20Sheet.pdf>.
- Reagn-Steiner, S., Yankey, D., jeyarajah, j., elam-evans, L., Curtis, C.R., MacNeil, J., Markowitz, L., Singleton, J. (2016). "National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13-17 Years - United States, 2015." Retrieved 07/11/2018, from <https://www.cdc.gov/mmwr/volumes/65/wr/mm6533a4.htm>.
- State Health Access Data Assistance Center. (2017). "Final Report: Study of the Impact of the ACA Implementation in Kentucky. ." Retrieved 2017, from [https://www.healthy-ky.org/res/images/resources/Impact-of-the-ACA-in-KY\\_FINAL-Report.pdf](https://www.healthy-ky.org/res/images/resources/Impact-of-the-ACA-in-KY_FINAL-Report.pdf)

Trust for America's Health and the Robert Wood Johnson Foundation. (2016). "The State of Obesity In Kentucky " Retrieved 05/15/2018, from <https://stateofobesity.org/states/ky/>.

United States Census Bureau. (2012-2016). "2012-2016 American community Survey 5 year Estimates." Retrieved 04/22/2018, from <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>.

University of Kentucky Center for Smokefree Policy. (2017). "Percent of Kentucky Covered by 100% Smoke-free Workplace Laws." Retrieved 07/01/2018, from <http://www.uky.edu/breathe/about-us/about-breathe>.

Witters, D. (2017). "Kentucky, Arkansas Post Largest Drops in Uninsured Rates." Retrieved 04/28/2018, from <http://news.gallup.com/poll/203501/kentucky-arkansas-post-largest-drops-uninsured-rates.aspx>.

## Glossary of Acronyms

<b>Glossary of Acronyms</b>	
17P	17-hydroxyprogesterone
5 A's	Ask, Advise, Assess, Assist and Arrange
AAP	American Academy of Pediatrics
ACA	Affordable Care Act
ACEs	Adverse Childhood Experiences
ACOG	American College of Obstetricians and Gynecologists
AEGP	Abstinence Education Grant Program
AHT	Abusive Head Trauma
AIM	Alliance for Innovation in Maternal and Child Health
ARC	Appalachian Regional Commission
ASCD	Association for Supervision and Curriculum Development
ASD	Autism Spectrum Disorders
ASIST	Applied Suicide Intervention Skills Training
ASTHO	Association of State and Territorial Health Officers
BECKY	Building Epidemiology Capacity in Kentucky
BMI	Body Mass Index
BRFSS	Behavioral Risk Factor Surveillance System
CACFP	Child and Adult Care Food Program
CCSHCN	Commission for Children with Special Health Care Needs
CDC	Centers for Disease Control and Prevention
CFR	Child Fatality Review
CHFS	Cabinet for Health and Family Services
CHS	Coordinated School Health
CHNA	Community Health Needs Assessments
CLPPP	Childhood Lead Poisoning Prevention Program
CMHC	Community Mental Health Centers
CMS	Centers for Medicare and Medicaid Services

CoIIN	Collaborative Improvement and Innovation Network
CPH	College of Public Health
CPS	Child Passenger Safety
CSH	Coordinated School Health
CSHP	Coordinated School Health Program
CSPAP	Comprehensive School Physical Activity Program
CTD	Connect the Dots Training
CTTS	Certified Tobacco Treatment Specialist
CYSHCN	Children and Youth with Special Health Care Needs
CV	Curriculum Vitae
DBHDID	Department for Behavioral Health, Developmental and Intellectual Disabilities
DCBS	Department for Community Based Services
DMCH	Division of Maternal and Child Health
DMS	Department for Medicaid Services
DPSA	Dental Provider Shortage Area
DSI	Death Scene Investigation
ECCS	Early Childhood Comprehensive Systems
ECD	Early Childhood Development
ECE	Early Care and Education
EED	Early Elective Delivery
EHDI	Early Hearing Detection and Intervention
F2F	Family to Family
FAQ's	Frequently Asked Questions
FPL	Federal Poverty Level
FQHC	Federally Qualified Health Center
FRYSC	Family Resource and Youth Services Centers
GDL	Graduated Drivers Licensing
GIFTS	Giving Infants and Families a Tobacco Free Start
NAPSAC C	Nutrition and Physical Activity Self Assessment for Child Care

GSEP	Graduate Student Epidemiology Program
HANDS	Health Access Nurturing Development Services
HBWW	Healthy Babies are Worth the Wait
HEALTH	Helping to Engage and Achieve Long Term Health
HEART	Healing, Empowering and Actively Recovering Together
HCV	Hepatitis C Virus
HHS	Health and Human Services
HIV	Human Immunodeficiency Virus
HomVee	Home Visiting Evidence of Effectiveness
HPV	Human Papilloma Virus
HPSA	Health Professional Shortage Areas
HRSA	Health Resources and Services Administration
HSP	Healthy Schools Program
HRA	Health Risk Assessment
GDL	Graduated Drivers Licensing
GIS	Geographic Information Systems
IBCLC	International Board Certified Lactation Consultants
iCARE	Integrative Collaboration to Improve ASD Referrals and Evaluation
ICD	International Classification of Diseases
IEP	Individual Education Plan
IH-CBT	In-Home Cognitive Behavioral Therapy
KACo	Kentucky Association of Counties
KAHPER D	Kentucky Association of Health, Physical Education, Recreation and Dance
KAR	Kentucky Administrative Regulation
KASPER	Kentucky All Schedule Prescription Electronic Reporting System
KBSR	Kentucky Birth Surveillance Registry
KCHIP	Kentucky Children's Health Insurance Program
KDE	Kentucky Department of Education
KDPH	Kentucky Department for Public Health

KEIS	Kentucky Early Intervention System
KFAP	Kentucky Folic Acid and Perinatal Partnership
KHA	Kentucky Hospital Association
KHBE	Kentucky Health Benefit Exchange
KHW	Kentucky HEALTH 1115 Waiver
KIP	Kentucky Incentives for Prevention Study
KIPRC	Kentucky Injury Prevention Research Center
KOHP	Kentucky Oral Health Program
KOHS	Kentucky Office of Highway Safety
KPA	Kentucky Perinatal Association
KPQC	Kentucky Perinatal Quality Collaborative
KRS	Kentucky Revised Statute
KSPAN	Kentucky Safety Prevention and Alignment Network
KY	Kentucky
KYSF	Kentucky Strengthening Families
LGBT	Lesbian, Gay, Bisexual, Transgender
LHDs	Local Health Departments
LSWP	Local School Wellness Policy
MAT	Medication Assisted Treatment
MATR	Maternal Assistance Towards Recovery
MBD	Moving Beyond Depression™
MCH	Maternal and Child Health
MCOs	Managed Care Organizations
ME	Medical Examiner
MIECHV	Maternal Infant and Early Childhood Home Visitation
MLS	Maternal Lifestyle Study
MMR	Maternal Mortality Review
MMRC	Maternal Mortality Review Committee
MOD	March of Dimes
MRA	My <i>Rewards</i> Account

MVA	Motor Vehicle Accidents
NAS	Neonatal Abstinence Syndrome
NBS	Newborn Screening
NGA	National Governor's Association
NICHD	National Institute of Child Health and Human Development
NICU	Neonatal Intensive Care Unit
NPM	National Performance Measures
NRT	Nicotine Replacement Therapy
NSCH	National Survey of Children's Health
NS- CSHCN	National Survey of Children with Special Health Care Needs
OB/GYN	Obstetrician/Gynecologist
OHE	Office of Health Equity
OHS	Office of Highway Safety
ODD	Opioid Use Disorder
QPR	Question, Persuade, and Refer
PAC	Perinatal Advisory Committee
PAHT	Pediatric Abusive Head Trauma
PA	Physical Activity
PARS	Psychological Assessment of Resources
PDSA	Plan-Do-Study-Act Cycles
PE	Presumptive Eligibility
PFK	Partnership for a Fit Kentucky
PI	Principal Investigator
PIP	Performance Improvement Plan
PRAMS	Pregnancy Risk Assessment Monitoring Survey
PREP	Personal Responsibility Education Program
PSAs	Public Safety Announcements
PYFP	Presidential Youth Fitness Program
RTT	Race to the Top

SAMHSA	Substance Abuse and Mental Health Services Administration
SFMNP	Senior Farmers' Market Nutrition Program
SHAPE	School Health and Physical Education
SIAC	State InterAgency Council
SIDS	Sudden Infant Death Syndrome
SMARTS	Supporting Mothers to Achieve Recovery through Treatment and Services
SNAP	Supplemental Nutrition Assistance Program
SOAR	Shaping Our Appalachian Region
SPM	State Performance Measures
SSDI	State Systems Development Initiative
SSIP	State Systematic Improvement Plan
SUD	Substance Use Disorder
SUID	Sudden Unexpected Infant Death
TA	Technical Assistance
TFS	Tobacco-Free School
TOT	Training of Trainers
TRAIN	Training Finder Real-time Affiliate Integrated Network
UAB	University of Alabama at Birmingham
UK	University of Kentucky
UK CPH	University of KY College of Public Health
UL	University of Louisville
WIC	Women, Infants and Children
WSCC	Whole School, Whole Community, and Whole Child
YAC	Youth Advisory Council
YRBSS	Youth Risk Behavior Surveillance System

## CURRICULUM VITAE

Henrietta S. Bada-Ellzey, M.D., M.P.H.

07/11/2018

**BIRTH PLACE:** Philippines

**MARITAL STATUS:** Married (Joel William Ellzey)

### EDUCATION:

- July 1964–April 1969: Graduate/Medical School:  
University of Santo Tomas  
Faculty of Medicine and Surgery  
Manila, Philippines  
Doctor of Medicine, April 1969
- April 1969–Sept 1969: Postgraduate: Externship: Internal Medicine,  
Veterans Memorial Hospital  
Quezon City, Philippines
- 1969–1970 House Physician: Simeon Cunanan Memorial Hospital  
Quezon City, Philippines
- Sept 1970–August 1971: Rotating Internship  
South Side Hospital  
Pittsburgh, Pennsylvania
- Sept 1971–August 1973: Residency in Pediatrics  
University of Louisville Hospitals  
Louisville, Kentucky
- Sept 1973–August 1975: Fellowship–Neonatology  
University of Louisville Hospitals  
Louisville, Kentucky
- Sept 1998–May 2000: Master of Public Health (Public Health Practice)  
University of South Florida College of Public Health  
Tampa, Florida

### BOARD CERTIFICATION:

- December 5, 1976; Certificate No. 19959  
American Board of Pediatrics  
Pediatric Specialty Board Certification
- November 2, 1979; Certificate No. 606  
American Board of Pediatrics  
Sub-Board of Neonatal-Perinatal Medicine

## **MEDICAL LICENSURE:**

- August 26, 1969 Licensure Examinations:  
Philippine Board of Medical Examiners  
Registration Certificate: 36818
- September 10, 1969 Educational Council of Foreign Medical Graduates (ECFMG)  
Standard Certificate: 117-796-3
- February 22, 1974 Kentucky State Board of Medical Examiners (FLEX)  
Registration Certificate No. 17234
- Licensure by Endorsement:
  - June 24, 1975 State of Illinois, Department of Registration and Education  
Physician's Certificate No. 36-51090
  - September 25, 1980 State of Tennessee Licensing Board for the Healing Arts  
Medical License No. M.D. 12944

## **SOCIETY MEMBERSHIPS:**

American Academy of Pediatrics

American Pediatric Society

American Academy for Cerebral Palsy and Developmental Medicine

American Association for the Advancement of Science

American Institute for Ultrasound in Medicine

Biomedical Engineering Society

Kentucky Pediatric Society

Society for Pediatric Research

Southern Society for Pediatric Research

Kentucky Perinatal Association

Southeastern Association of Neonatologists

## **AWARDS:**

- 1974-1971: Cardiology Intern of the Year  
South Side Hospital  
Pittsburgh, Pennsylvania
- 1974-1975: Chairman's Award

University of Louisville Hospitals  
Louisville, Kentucky

- Best Doctors in America  
1992, 1993, 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015
- May 1994: Outstanding Alumna - Academic Achievement  
University of Santo Tomas Medical Alumni Association  
May 1994
- Dec 1994: Thomasian Outstanding Medical Alumna in Research  
University of Santo Tomas
- Nov 2000: Phi Kappa Phi Honor Society,  
University of South Florida
- June 2006: Chairman's Research Award  
Department of Pediatrics, University of Kentucky
- June 2009: Tagalie Heister Senior Scholarship Award in Mentoring  
Department of Psychiatry, University of Kentucky  
Mentee: Mitchell Douglass, MD  
February 2010: Pediatric Educator Award, Sothern Society for Pediatric Research
- March 2014: 2014 Mentor Award: Center for Clinical and Translational Research  
Science, University of Kentucky
- October 2014: Thomas Pauly Excellence in Neonatology Leadership
- March 12, 2015: Faculty Nominee: Sarah Bennett Holmes Award
- June 2015: Thomas Pauley Perinatal service Award from the Kentucky Perinatal  
Association
- February 2017 Founder's Award Southern Society for Pediatric Research

#### **UNIVERSITY APPOINTMENTS:**

- 9/75-8/76 Clinical Assistant Professor, Department of Pediatrics  
Southern Illinois University, School of Medicine, Springfield, Illinois
- 9/76-6/80 Assistant Professor, Department of Pediatrics, Southern Illinois  
University,

School of Medicine, Springfield, Illinois

- 7/80-6/84 Associate Professor, Department of Pediatrics  
The University of Tennessee, Memphis, Memphis, Tennessee
- 7/82-6/84 Associate Professor, Department of Obstetrics and Gynecology  
The University of Tennessee, Memphis, Memphis, Tennessee
- 7/84-10/01 Professor, Department of Pediatrics, The University of Tennessee,  
Memphis  
Memphis, Tennessee
- 7/84-10/01 Professor, Department of Obstetrics and Gynecology  
The University of Tennessee, Memphis, Memphis, Tennessee
- 6/94-10/01 Professor, Department of Acute Care, College of Nursing  
The University of Tennessee, Memphis, Memphis, Tennessee
- 7/99-10/01 Adjunct Professor, Department of Biology  
The University of Memphis, Memphis, Tennessee
- 11/00-10/01 Adjunct Professor, Graduate Faculty, Department of Biomedical  
Engineering,  
The University of Memphis, Memphis, Tennessee
- 10/01-9/15 Clinical Professor, Department of Pediatrics  
The University of Tennessee, Memphis, Tennessee
- 10/01-09/12 Chief, Division of Neonatology  
University of Kentucky College of Medicine, Lexington, Kentucky
- 10/01-Present Professor of Pediatrics, Division of Neonatology  
University of Kentucky College of Medicine, Lexington, Kentucky
- 11/01-Present Professor, School of Public Health , Department of Health  
Behavior  
University of Kentucky, Lexington, Kentucky
- 08/02-6/30/2016 Director, Neonatal-Perinatal Fellowship Program  
University of Kentucky, Department of Pediatrics
- 10/11- 9/2013 Vice Chair, Academic Affairs and Research

Department of Pediatrics,  
University of Kentucky, College of Medicine

- 10/13 – present: Vice Chair, Academic Affairs, Department of Pediatrics. University of Kentucky.
- 09/14 – present: Member, University Of Kentucky Faculty Senate
- 7/15 – 2017 Member University of Kentucky, Academic Area Advisory Committee for Health Care Clinical Sciences
- 8/15 – 2016: Member (voting): Graduate medical Education Committee
- 2/01/2017-present: Director, Maternal and Child Health Division, Kentucky Department for Public Health, Cabinet for Health and Family Services.

#### **HOSPITAL APPOINTMENTS:**

- 9/75-9/76 Associate Coordinator, Newborn Services, St. John's Hospital, Springfield, Illinois
- 9/75-6/80 Active Member, Medical Staff, Memorial Medical Center, Springfield, Illinois
- 9/75-6/80 Active Member, Medical Staff, St. John's Hospital, Springfield, Illinois
- 9/76-6/80 Associate Director, Newborn Services, St. John's Hospital, Springfield, Illinois
- 2/81-10/01 Active Member, Medical Staff, The Regional Medical Center at Memphis, Memphis, Tennessee
- 11/80-5/82 Active Member, Medical Staff, Le Bonheur Children's Medical Center, Memphis, Tennessee
- 6/82-9/96 Consultant, Medical Staff, Le Bonheur Children's Medical Center, Memphis, Tennessee
- 10/96-10/01 Associate Member, Medical Staff, Le Bonheur Children's Medical Center, Memphis, Tennessee

- 11/01-2006 Medical Director, NICU, University of Kentucky Hospital
- 11/01-2007 Neonatal Critical Care Transport Director
- 11/01-Present Active Member, Medical Staff, University of Kentucky Hospital, Lexington, Kentucky

**OTHER APPOINTMENTS:**

- 1976-1980 Member, Board of Directors; Chairman, Health Advisory Committee, National Foundation March of Dimes, Capitol Chapter, Springfield, Illinois
- 1999-2001 Ad Hoc Member, Neurology A Study Section, National Institute of Neurological Disorders and Stroke
- 1999-2001 Chairperson, Folic Acid Campaign Committee, West Tennessee Chapter March of Dimes Birth Defects Foundation
- 2000-10/01 Steering Committee Representative, State Merger-Folic Acid State Council, March of Dimes Birth Defects Foundation (Tennessee)
- 2000-2004 Editorial Board, Journal of Pediatric Pharmacology and Therapeutics
- 2000-2002 Member, Committee on Practice Parameters on Neonatal Imaging, Child Neurology Society
- 2003 Ad-Hoc Member, Review Panel, NIH-NICHD R34 Grant Proposals
- 2005-2007 President-elect, Kentucky Perinatal Association
- 2007-2009 President, Kentucky Perinatal Association
- 2006 Ad-hoc member: NIH study section: Biobehavioral mechanisms of stress and health
- 2006: Ad-hoc member: NIH study section: Child Psychopathology and Developmental Disabilities
- 2007 – 2011 Permanent member: NIH study section: Child Psychopathology and Developmental Disabilities.

- 2011 – Present Member, Advisory Board, Neonatal Research Network, NICHD, NIH
- 2012, November 1,2 Ad Hoc Member NIH Emphasis Panel for review of P01 application, Biobehavioral Mechanisms of Stress and Health
- 2013: May 5: Moderator: Session on Neonatal Epidemiology. Pediatric Academic Societies Meeting. Washington DC
- 2013, November 1 Grant Reviewer: Prenatal Methamphetamine Exposure and Executive Function in Childhood: Neurological Foundation of New Zealand
- 2014, June 23, 24: Ad Hoc Member: Child psychopathology Developmental Disabilities Study Section, NIH.
- 2015: April 25 Moderator Session on Neonatal Practices, Pediatric Academic Societies, San Diego, CA.
- 2015, April 27 Poster Facilitator: NICU Follow-up: Pediatric Academic Societies Meeting, San Diego, CA.
- 2016: April 30 Moderator Session on NICU Practices, Pediatric Academic Societies Meeting, Baltimore MD.
- 2016: May 1 Poster facilitator, Neonatal Follow-up, Pediatric Academic Societies Meeting, Baltimore MD
- 2018 January 10. Panel Member, NIDA Workshop on Prenatal Opioid Exposure
- 2018 March 9-10; Co-Chair, SAMHSA Expert Panel on “Developmental Impacts on Children of Opioid Use During Pregnancy: Pragmatic Approaches to Supporting Children and Families.” Rockville, Maryland.
- 2018 May 8: Panel Discussant: Pediatric Academic Societies Meeting, Follow-up of Infants with Neonatal Abstinence Syndrome: Toronto, Canada
- 2018 June 11: Panel Discussant, “Non-opioid treatment for treatment of NAS,” Symposium on “Neonatal Abstinence Syndrome: Effects of Opioids on the Developing Brain,” College on Problems of Drug Dependence (CPDD), San Diego, CA

## TEACHING EXPERIENCE:

Teaching related to recognition and management of different disorders in the newborn and premature infant. Because of personal interest in neonatal brain disorders and perinatal addiction, topics related to this area comprise over 50 percent of my teaching commitment; e.g., cerebral blood flow, neurophysiology, asphyxia, intraventricular hemorrhage, substance use during pregnancy, treatment of narcotic withdrawal manifestations, .

- University of Tennessee:  
Medical Students Ob-Gyn Clerkship 30-35 6 hours/year  
Graduate Nurses Master's Program, Maternal-Child Nursing 3-5  
10 hours/year
- Graduate Nurses Level II-III Newborn Nursing 4-8 2 hours/year  
Residents' teaching/supervision 6-7  
3/4 months/year
- Residents' Conference, Fellows Conference, Grand Rounds As assigned  
University of Kentucky  
Residents lectures: as assigned
- Course faculty : CPH 778 now designated as CPH 740 (3 credit hours):  
Introduction to Maternal and Child Health  
University of Kentucky of Kentucky College of Public Health  
Spring Semester: January-May, 2006, 2007, 2008, 2009, 2010, 2011, 2012,  
2013, 2014, 2015, 2016
- Course Faculty: NUR 653-002: Pathophysiology  
University of Kentucky College of Nursing  
Spring Semester: January – May 2007

## Faculty Advisor/Mentor for Fellows' Research Projects:

- 1989: Massroor Pourcyrous: Determination of C-Reactive Protein and other acute phase reactants in neonatal infections; Cerebral flow studies in newborn pigs with asphyxia and reventilation.
- 1992: Tara Burnette, M.D., and Nancy Shull, M.D.: Effect of Pancuronium on Physiologic Responses to Nursery Procedures
- 1994: Shantharama Karanth, M.D.: Late Onset Periventricular-Intraventricular Hemorrhage
- 1994: George Latta, III, M.D.: Clinical Utilization of Two Blood Culture Methods in the Neonatal Intensive Care Unit
- 1999: Vladimir Levine, M.D.: Preservation of Cerebral Vascular Reactivity by Sodium Channel Inhibition in Experimental Acute Prolonged Hypotensive Hypoxic Injury (HI) in Newborn Pigs

- 1999: Pracha Nuntnarumit, M.D.: Relationship of Neurobiologic Risk Score and Neurodevelopmental Outcome in Extremely Low Birthweight (ELBW) Infants; Cerebral Blood Flow Velocity Changes After Bovine Natural Surfactant Instillation; Use of Tolazoline Infusion in Extremely Preterm Infants: Efficacy and Safety
- 2000: Ajay Talati, M.D.: Early Predictors of Long-Term Outcome in Neonatal Asphyxia; Power Spectral Analysis of ECG Signals in Infants with Perinatal Asphyxia And Correlation With Long-Term Outcome; Changes in Heart Rate and Blood Pressure Variability Associated with Surfactant Instillation In Premature Infants With Respiratory Distress Syndrome.
- 2002: Eric Reynolds, M.D.: Variations in Brain in Healthy and Drug-Exposed Infants; B-type Natriuretic Peptide in the Diagnosis and Management of Persistent Pulmonary Hypertension in Newborns.
- 2003: Thitinant Sithisarn, M.D.: Stress Systems in Young Adults Following in utero cocaine exposure; The ontogeny of HPA axis response in rats prenatally exposed to oxycodone.
- 2008: Arebu Abdu, MD: Neonatal Sepsis and Meningitis a 10-year experience
- 2008: Ganesh Sanku MD: Echocardiographic findings in pulmonary hypertension
- 2009: M.Todd Hambleton, MD: Hear rate variability in infants exposed to opiates in utero
- 2010: Tonia Reid MD: Use on prescription painkillers in rural populations
- 2010: Minh Ho: Caffeine administration and number of O2 saturations decreases in infants with BPD
- 2011: Sumit Dang, MD: Treatment of neonatal abstinence syndrome with methadone; effects on neonatal neurobehavior performance.
- 2013: Safdar Khan, MD. Urinary NT-pro BNP in Patent Ductus Arteriosus
- 2014: Vanessa Concina, MD. NT-proBNP as a predictor of pulmonary hypertension in bronchopulmonary dysplasia
- 2014: Katrina Ibonia: Perfusion index and intermittent hypoxemia in association with blood transfusion in the neonates
- 2014: Enrique Gomez-Pomar: Perfusion index in patent ductus arteriosus; Simplified Finnegan Scoring in Neonatal abstinence syndrome
- Faculty Mentor for medical students selected through the Professional Students Medical Research Foundation Program, students of other colleges, and College of Public Health Students.
- 2008: Lindsay Bendure. Prevalence of prenatal opioid exposure in Eastern Kentucky compared to urban Lexington Area.
- 2011: Olivia Winfry, Comparison of incidence of Neonatal Abstinence syndrome between prenatal opiate prescription drugs and buprenorphine exposure
- 2013: Aaron Samide, clinical predictors of BPD from the early birth variables and respiratory status at 28 days.

- 2014: Ashely Christian. Factors that may affect the variability in Finnegan scoring
- 2014: Sarah Czack. Genetic susceptibility to morphine or clonidine in the treatment of neonatal abstinence syndrome.
- 2015: Benjamin Nicotera. Assessment of pain in babies with prenatal exposure to morphine and tobacco.
- 2016: Jordan Perkins (CPH): Alarming increase in Perinatal Hepatitis C exposure associated with increase in neonatal abstinence syndrome and maternal drug use.
- 2016: Elizabeth Mirsky. Developmental Follow-up of Children with prenatal opiate exposure.
- 2016: Nur U. Ali (CPH). Maternal weight gain in pregnancy and newborn outcomes.

See also section on Committee Memberships (graduate or doctoral committees).

**Residents and Fellows Lectures:**

Various topics including: the following:

1. Neonatal Intraventricular Hemorrhage
2. Polycythemia/hyperviscosity
3. Temperature regulation
4. Neonatal abstinence syndrome
5. Respiratory management in the NICU
6. Follow-up on preterm infants
7. Long-term follow-up of drug exposed neonates
8. Neonatal cerebral circulation
9. Fetal and neonatal brain development
10. Statistical methods lecture series
11. Research methods/design series
12. Neonatal anemia
13. Neonatal hypoglycemia
14. Neonatal Resuscitation
15. Neonatal Abstinence Syndrome

**AD HOC REVIEWER (Previous years):**

- The Journal of Pediatrics, New England Journal of Medicine, Science, American Journal of Public Health
- Developmental Pharmacology, Journal of Perinatology, Ultrasound in Medicine and Biology. Pediatric Research
- Annals of Bioengineering., Obstetrics and Gynecology, Archives of Diseases in Childhood, American Journal of Perinatology, American Journal of Obstetrics and Gynecology, Pediatrics, American journal of Obstetrics and Gynecology, Development and Psychopathology, Neurotoxicology and Teratology, Alcoholism, Clinical Experimental Research, Acta Paediatrica Scandinavia, Journal of Child Psychology and Psychiatry, Physiologic Measurements, Addiction, Aggressive Behavior, Archives Diseases Childhood (fetal-neonatal)
- Journal of Obesity, Journal of Child Psychology and Psychiatry, Physiological Measurements, Neuroscience & Biobehavioral Reviews

2015-2018

- Journal of Child Psychology and Psychiatry
- Journal of Affective disorders
- Neurotoxicology and Teratology
- Obstetrics and Gynecology
- Pediatrics
- Child Development

#### **PUBLICATIONS (BOOKS):**

- Korones SB, Bada HS: Neonatal Decision Making, Philadelphia, Mosby Year Book, 1993.

#### **PUBLICATIONS (BOOK CHAPTERS):**

1. Bada HS, Hajjar W, Sumner DS, Bashiru M: Noninvasive monitoring of cerebrovascular changes in neonatal asphyxia and intraventricular hemorrhage. In Rolfe (ed.), Fetal and Neonatal Physiological Measurements, London, Pitman Medical Limited, 1980, pp 334-339.
2. Bada HS, Hajjar W, Chua C, Sumner DS: Noninvasive diagnostic evaluation of neonatal cerebrovascular disorders. In Diethrich EB (ed.), Noninvasive Cardiovascular Diagnosis, Littleton, MA, PSG Publishing Co., Inc., 1981.
3. Bada HS, Sumner DS: Significance of cerebral arterial pulsatile flow changes in predicting intraventricular hemorrhage. In Diethrich EB (ed.), Noninvasive Assessment of the Cardiovascular System, Littleton, MA, John Wright-PSG Publishing Co., Inc., 1982, pp 119-122.

4. Perry EH, Ray JD, Bada HS: A microcomputer-based system for monitoring premature infants, presented before the International Society for Mini and Micro Computers, Beverly Hills, CA, February 1986. In Hamza MH, Lee GKF (eds.), *Software and Hardware Applications for Microcomputers*, Anaheim, CA, Acta Press, February 1986, pp 216-220.
5. Ray JD, Perry EH, Bada HS: Data acquisition system for low birth weight neonates, presented before the Institute for Electricians and Electrical Engineers, New Haven, CT, March 13, 1986. In Orphanoudakis SC (ed.), *Proceedings of the Twelfth Northeast Bioengineering Conference*, New Haven, Yale University Press, 1986, pp 47-50.
6. Ray JD, Perry EH, Bada HS: A microcomputer based data acquisition system used to monitor low birthweight infants, presented before Southern Biomedical Engineering Conference, Shreveport, LA, October 21, 1986. In Saha S (ed.), *Biomedical Engineering V: Recent Developments*, New York, Pergamon Press, October 1986, pp 179-182.
7. Perry EH, Ray JD, Bada HS: Using computers to determine physiological responses of premature infants to routine intensive care procedures, presented before the Southern Biomedical Engineering Conference, Greenville, SC, October 28, 1988. In *Proceedings of the Seventh Southern Biomedical Engineering Conference*, Clemson, SC, Clemson University, October 1988, pp 185-187.
8. Bada HS: Doppler measurement of the velocity of cerebral blood flow. In Brans Y, Hay W (eds.), *Physiological Monitoring and Instrument Diagnosis in Perinatal and Neonatal Medicine*, New York, Cambridge University Press, 1995, pp 315-328.
9. Bada HS, Bauer CR, Shankaran S, Lester B, Wright LL, Verter J, Smeriglio VL, Finnegan LP, Maza PL: Central and autonomic nervous systems' signs associated with in utero exposure to cocaine/opiates. In Harvey JA, Kosofsky BE (eds.), *Cocaine: Effects on the Developing Brain*. *Annals of the New York Academy of Sciences*, New York, The New York Academy of Sciences, 1998, pp 431-434.
10. Maza PL, Wright LL, Bauer CR, Shankaran S, Bada HS, Lester B, Krause-Steinrauf H, Smeriglio VL, Bowler A, Katsikiotis V: Maternal lifestyles study (MLS): Caretaking environment and stability of substance-exposed infants at one month corrected age. In Harvey JA, Kosofsky BE (eds.), *Cocaine: Effects on the Developing Brain*. *Annals of the New York Academy of Sciences*, New York, The New York Academy of Sciences, 1998, pp 358-361.
11. Sithisarn T, Bada HS. *Prenatal Drug Exposure: Childhood Behavior and Cognitive Functioning in Nass RD and Frank Y*, (Editors) *Cognitive and Behavioral Abnormalities of Pediatric Diseases*, 2010 Oxford University Press, Inc New York,

12. Granger DT, Bada HS. Book chapter: Pharmacologic Treatment of Neonatal Abstinence Syndrome. In Aranda J and Yaffe S (Editors). Neonatal and Pediatrics Pharmacology, 4th Edition, 2010 Lippincott Williams and Wilkins Philadelphia, Baltimore, New York
13. Bada HS: Neonatal Intraventricular Hemorrhage. In Rudolph CD, Rudolph AM, Lister G, First LR, Gershon AA, (Editors). Rudolph's Pediatrics, 22nd Edition., McGraw-Hill Companies, Publisher, 2011, New York, NY.

**PUBLICATIONS (JOURNALS) OVER 150 and recent publications are listed:**

1. Reynolds, EW, Riel-Romero RM, Bada HS. Neonatal abstinence syndrome and cerebral infarction following maternal codeine use during pregnancy. Clin Pediatr (Phila). 2007 Sep;46(7):639-45.
2. Griffith J, Gantz S, Lowry J, Dai H, Bada H. Insurance reimbursement in a university-based pediatric weight management clinic. J Natl Med Assoc. 2007 Sep;99(9):1037-41.
3. Sithisarn T, Bada HS, Dai H, Reinhardt CR, Randall DC, Legan SJ. Effects of perinatal oxycodone exposure on the response to CRH in late adolescent rats. Neurotoxicol Teratol. 2008 Mar-Apr;30(2):118-24. Epub 2008 Jan 11.
4. Bada HS, Langer J, Twomey J, Bursi C, Lagasse L, Bauer CR, Shankaran S, Lester BM, Higgins R, Maza PL. Importance of Stability of Early Living Arrangements on Behavior Outcomes of Children with and without Prenatal Drug Exposure. J Dev Behav Pediatr. 2008 Jun; 29(3):173-182.
5. Levine TP, Liu J, Das A, Lester B, Lagasse L, Shankaran S, Bada HS, Bauer CR, Higgins R. Effects of prenatal cocaine exposure on special education in school-aged children. Pediatrics. 2008 Jul;122(1):e83-91. Epub 2008 Jun 9.
6. Levine TP, Liu J, Das A, Lester B, Lagasse L, Shankaran S, Bada HS, Bauer CR, Higgins R. Effects of prenatal cocaine exposure on special education in school-aged children. Pediatrics. 2008 Jul;122(1):e83-91. Epub 2008 Jun 9.
7. Bagner DM, Sheinkopf SJ, Miller-Loncar C, LaGasse LL, Lester BM, Liu J, Bauer CR, Shankaran S, Bada H, Das A. The effect of parenting stress on child behavior problems in high-risk children with prenatal drug exposure. Child Psychiatry Hum Dev. 2009 Mar;40(1):73-84. Epub 2008 Jul 15.
8. Simmons LA, Havens JR, Whiting JB, Holz JL, Bada H. Illicit drug use among women with children in the United States: 2002-2003. Ann Epidemiol. 2009 Mar;19(3):187-93.

9. Abdu AT, Kriss VM, Bada HS, Reynolds EW. Adrenal Hemorrhage in a Newborn. *Am J Perinatol*. 2009 Sep;26(8):553-7. Epub May 18.
10. Lester BM, Bagner DM, Liu J, LaGasse LL, Seifer R, Bauer CR, Shankaran S, Bada H, Higgins RD, Das A. Infant neurobehavioral dysregulation: behavior problems in children with prenatal substance exposure. *Pediatrics*. 2009 Nov;124(5):1355-62. Epub 2009 Oct 12.
11. Liu J, Bann C, Lester B, Tronick E, Das A, Lagasse L, Bauer C, Shankaran S, Bada H. Neonatal Neurobehavior predicts medical and behavioral outcome. *Pediatrics*. 2010 Jan;125(1):e90-8. Epub 2009 Dec 7.
12. Stephens BE, Liu J, Lester B, Lagasse L, Shankaran S, Bada H, Bauer C, Das A, Higgins R. Neuro behavioral assessment predicts motor outcome in preterm infants. *J Pediatr*. 2010 Mar;156(3):366-71. Epub 2009 Nov 22
13. Stone KC, LaGasse LL, Lester BM, Shankaran S, Bada HS, Bauer CR, Hammond JA. Sleep problems in children with prenatal substance exposure: the Maternal Lifestyle study. *Arch Pediatr Adolesc Med*. 2010 May;164(5):452-6.
14. Shankaran S, Bann CM, Bauer CR, Lester BM, Bada HS, Das A, Higgins RD, Poole WK, LaGasse LL, Hammond J, Woldt E. Prenatal cocaine exposure and BMI and blood pressure at 9 years of age. *J Hypertens*. 2010 Jun;28(6):1166-75.
15. Lester BM, Lagasse LL, Shankaran S, Bada HS, Bauer CR, Lin R, Das A, Higgins R. Prenatal cocaine exposure related to cortisol stress reactivity in 11-year-old children. *J Pediatr*. 2010 Aug;157(2):288-295.e1. Epub 2010 Apr 18.
16. Gaskins RB, LaGasse LL, Liu J, Shankaran S, Lester BM, Bada HS, Bauer CR, Das A, Higgins RD, Roberts M. Small for gestational age and higher birth weight predict childhood obesity in preterm infants. *Am J Perinatol*. 2010 Oct;27(9):721-30. pub 2010 Apr 20.
17. Sithisarn T, Bada HS, Dai H, Randall DC, Legan SJ. Effects of perinatal cocaine exposure on open field behavior and the response to corticotropin releasing hormone (CRH) in rat offspring. *Brain Res*. 2011 Jan 25;1370:136-44. Epub 2010 Nov 12.
18. Bada HS, Bann CM, Bauer CR, Shankaran S, Lester B, Lagasse L, Hammond J, Whitaker T, Das A, Tan S, Higgins R. Preadolescent behavior problems after prenatal cocaine exposure: Relationship between teacher and caretaker ratings (Maternal Lifestyle Study). *Neurotoxicol Teratol*. 2011 Jan-Feb;33(1):78-87. Epub 2010 Jun 30.
19. Lagasse LL, Gaskins RB, Bada HS, Shankaran S, Liu J, Lester BM, Bauer CR, Higgins RD, Das A, Roberts M. Prenatal cocaine exposure and childhood obesity at nine years. *Neurotoxicol Teratol*. 2011 Mar-Apr;33(2):188-97. Epub 2010 Nov 23

20. Whitaker TM, Bada HS, Bann CM, Shankaran S, Lagasse L, Lester BM, Bauer CR, Hammond J, Higgins R. Serial Pediatric Symptom Checklist Screening in Children with Prenatal Drug Exposure. *J Dev Behav Pediatr*. 2011 apr;32(3):206-15.
21. Shankaran S, Bann C, Das A, Lester B, Bada H, Bauer CR, La Gasse L, Higgins RD. Risk for obesity in adolescence starts in early childhood. *J Perinatol*. 2011 Mar 17. [Epub ahead of print]
22. Michalowicz BS, Hodges JS, Lussky RC, Bada H, Rawson T, Buttross LS, Chiriboga C, Diangelis AJ, Novak MJ, Buchanan W, Mitchell DA, Papapanou PN. Maternal periodontitis treatment and child neurodevelopment at 24 to 28 months of age. *Pediatrics*. 2011 May;127(5):e1212-20. Epub 2011 Apr 11.
23. Bauer CR, Lambert BL, Bann CM, Lester BM, Shankaran S, Bada HS, Whitaker TM, Lagasse LL, Hammond J, Higgins RD. Long-term impact of maternal substance use during pregnancy and extrauterine environmental adversity: stress hormone levels of preadolescent children. *Pediatr Res*. 2011 Aug;70(2):213-9.
24. Shankaran S, Das A, Bauer CR, Bada HS, Lester BM, Wright LL, Higgins RD, Poole WK. Prenatal cocaine exposure and small-for-gestational-age status: Effects on growth at 6 years of age. *Neurotoxicol Teratol*. 2011 Sep;33(5):575-81. Epub 2011 Aug 16.
25. Fisher PA, Lester BM, DeGarmo DS, Lagasse LL, Lin H, Shankaran S, Bada HS, Bauer CR, Hammond J, Whitaker T, Higgins R. The combined effects of prenatal drug exposure and early adversity on neurobehavioral disinhibition in childhood and adolescence. *Dev Psychopathol*. 2011 Aug;23(3):777-88.
26. Lester BM, Lin H, Degarmo DS, Fisher PA, Lagasse LL, Levine TP, Shankaran S, Bada HS, Bauer CR, Hammond JA, Whitaker TM, Higgins RD. Neurobehavioral disinhibition predicts initiation of substance use in children with prenatal cocaine exposure. *Drug Alcohol Depend*. 2012 Nov 1;126(1-2):80-6. May 18. [Epub 2012, May 18]
27. Levine TP, Lester B, Lagasse L, Shankaran S, Bada HS, Bauer CR, Whitaker TM, Higgins R, Hammond J, Roberts MB. Psychopathology and Special Education Enrollment in Children with Prenatal Cocaine Exposure. *J Dev Behav Pediatr*. 2012 Jun;33(5):377-386.
28. Sithisarn T, Granger DT, Bada HS. Consequences of prenatal substance use. *Int J Adolesc Med Health* 2011: Nov 29:24(2):105-12 doi: 10.1515/ijamh.2012.016. Review.
29. Bada HS, Bann CM, Whitaker TM, Bauer CR, Shankaran S, LaGasse L, Lester B, Hammond J, Higgins R. Protective Factors Can Mitigate Behavior Problems Following Prenatal Cocaine/Polydrug Exposures. *Pediatrics* 2012 Dec;130(6):e1479-88. Doi: 10.1542/peds.2011-3306. Epub 2012 Nov 26.

30. Sithisarn T, Bada HS, Charnigo RJ, Legan SJ, Randall DC. Effects of perinatal oxycodone exposure on the cardiovascular response to acute stress in male rats at weaning and in young adulthood. *Fron Physiol*. 2013 Apr 24;4:85. Doi 10.3389/fphys.2013.00085. Epub 2013.
31. Conradt E, Sheinkopf SJ, Lester BM, Tronick E, LaGasse LL, Shankaran S, Bada H, Bauer CR, Whitaker TM, Hammond JA. Maternal Lifestyle Study. Prenatal substance exposure: neurobiologic organization at 1 month. *J Pediatr*. 2013 Oct;163(4):989-94.e1. Doi: 10.1016/j.peds.2013.04.033. Epub 2013 Jun 4.]
32. Conradt E, Abar B, Sheinkopf S, Lester B, Lagasse L, Seifer R, Shankaran S, Bada H, Bauer C, Whitaker T, Hinckley M, Hammond J, Higgins R. The role of prenatal substance exposure and early adversity on parasympathetic functioning from 3 to 6 years of age. *Dev Psychobiol*. 2014; may 56(4):821-35. doi: 10.1002/dev.21155. Epub] Sep 3.
33. Zieber N, Kangas A, Hock A, Hayden A, Collins R, Bada H, Joseph JE, Bhatt RS. Perceptual specialization and configural face processing in infancy. *J Exp Child Psychol*. 2013 Nov;116(3):625-39. doi: 10.1016/j.jecp.2013.07.007. Epub 2013 Aug 28.
34. Lambert BL, Bann CM, Bauer CR, Shankaran S, Bada HS, Lester BM, Whitaker TM, LaGasse LL, Hammond J, Higgins RD. Risk-taking behavior among adolescents with prenatal drug exposure and extrauterine adversity. *J Dev Behav Pediatr*. 2013 Nov-Dec;34(9):669-79. doi:10.1097/01.DBP.0000437726.16588.e2.
35. Boral LI, Staubach ZG, de Leeuw R, Macivor DC, Kryscio R, Bada HS. Comparison of outcomes of Group O vs. Non-Group O premature neonates receiving Group O RBC transfusions. *Am J Clin Pathol* 2013 Dec; 140(6):780-6. doi: 10.1309/AJCPJX94SPZLQLGG.
36. Hambleton MT, Reynolds EW, Sithisarn T, Traxel SJ, Patwardhan AR, Crawford TN, Mendiondo MS, Bada HS. Autonomic Nervous System function following prenatal opiate exposure. *Front Pediatr* 2013 Oct 17;1:27. Doi: 10.3389/fped.2013.00037. eCollection 2013.
37. Aden U, Lin A, Carlo W, Leviton A, Murray JC, Hallman M, Lifton RP, Zhang H, Ment; Gene Targets for Intraventricular Hemorrhage Study Group. Candidate gene analysis: severe intraventricular hemorrhage in inborn preterm neonates. *J Pediatr* 2013 Nov; 163(5):1503-6.e1. doi: 10.1016/j.peds.2013.06.025. Epub 2013 Jul 26.
38. Laham JL, Breheny PJ, Gardner BM, Bada H. Procalcitonin to predict bacterial coinfection in infants with acute bronchitis: a preliminary analysis. *Pediatr Emerg Care*. 2014 Jan;30(1):11-5. Doi: 10.1097/PEC. 0000000000000026.
39. Rhein LM, Dobson NR, Darnall RA, Corwin MJ, Heeren TC, Poets CF, McEntire BL, Hunt CE; Caffeine Pilot Study group. Effects of caffeine on intermittent hypoxia in

infants born prematurely: a randomized clinical trial. *JAMA Pediatr.* 2014 Mar;168(9):250-7. Doi:10.1001/jamapediatrics.2013.4371.

40. Fallone MD, Lagasse LL, Lester BM, Shankaran S, Bada HS, Bauer CR. Reactivity and regulation of motor responses in cocaine-exposed infants. *Neurotoxicol Teratol.* 2014 Feb 28;43C:25-32. Doi: 10.1016/j.ntt.2014.02.005. [Epub ahead of print]

41. Shankaran S, Lin A, Maller-Kesselman J, Zhang H, O'Shea TM, Bada HS, Kaiser JR, Lifton RP, Bauer CR, Ment LR; Gene Targets for Intraventricular Hemorrhage Study. Maternal race, demography, and health care disparities impact risk for intraventricular hemorrhage in preterm neonates. *J Pediatr.* 2014 May;164(5):1005-1011.e3. doi:10.1016/j.jpeds.2014.01.036. Epub 2014 Feb 28.

42. Conradt E, Lagasse LL, Shankaran S, Bada H, Bauer CR, Whitaker TM, Hammond JA, Lester BM. Physiological correlates of neurobehavioral disinhibition that relate to drug use and risky sexual behavior in adolescents with prenatal substance exposure. Conradt E, Lagasse LL, Shankaran S, Bada H, Bauer CR, Whitaker TM, Hammond JA, Lester BM. *Dev Neurosci.* 2014;36(3-4):306-15. doi: 10.1159/000365004. Epub 2014 Jul 15. PMID:25033835

43. Conradt E, Degarmo D, Fisher P, Abar B, Lester BM, Lagasse LL, Shankaran S, Bada H, Bauer CR, Whitaker TM, Hammond JA. The contributions of early adverse experiences and trajectories of respiratory sinus arrhythmia on the development of neurobehavioral disinhibition among children with prenatal substance exposure. *Dev Psychopathol.* 2014 Jun 9:1-16. [Epub ahead of print] PMID:24909973

44. Conradt E, Abar B, Lester BM, LaGasse LL, Shankaran S, Bada H, Bauer CR, Whitaker TM, Hammond JA. Cortisol reactivity to social stress as a mediator of early adversity on risk and adaptive outcomes. *Child Dev.* 2014 Nov-Dec;85(6):2279-98. doi: 10.1111/cdev.12316. Epub 2014 Nov 6. PMID:25376131

45. Bada HS, Sithisarn T, Gibson J, Garlitz K, Caldwell R, Capilouto G, Li Y, Leggas M, Breheny P. Morphine versus clonidine for neonatal abstinence syndrome. *Pediatrics.* 2015 Feb;135(2):e383-91. doi: 10.1542/peds.2014-2377. PMID:25624389

46. Reid TL, Bendure LE, Crawford TM, Reynolds EW, Sithisarn T, and Bada HS. Drug Use During Pregnancy and Associated Maternal and Neonatal Complications, *Journal of Kentucky Medical Association*, May 2015, 113(5): 129-136.

47. Locke RL, Lagasse LL, Seifer R, Lester BM, Shankaran S, Bada HS, Bauer CR. Effects of prenatal substance exposure on infant temperament vary by context. *Dev Psychopathol.* 2016 May; 28(2):309-26. doi: 10.1017/S0954579415000504. Epub 2015 Jun 3. PMID: 26037110

48. Ment LR, Ådén U, Bauer CR, Bada HS, Carlo WA, Kaiser JR, Lin A, Cotten CM, Murray J, Page G, Hallman M, Lifton RP, Zhang H; Gene Targets for IVH Study Group and the Neonatal Research Network. Genes and environment in neonatal

intraventricular hemorrhage. *Semin Perinatol.* 2015 Dec;39(8):592-603. doi: 10.1053/j.semperi.2015.09.006. Epub 2015 Oct 26. Review. PMID: 26516117

49. Conradt E, Beauchaine T, Abar B, Lagasse L, Shankaran S, Bada H, Bauer C, Whitaker T, Hammond J, Lester B. Early caregiving stress exposure moderates the relation between respiratory sinus arrhythmia reactivity at 1 month and biobehavioral outcomes at age 3. *Psychophysiology.* 2016 Jan;53(1):83-96. doi: 10.1111/psyp.12569. PMID: 26681620

50. Lagasse LL, Conradt E, Karalunas SL, Dansereau LM, Butner JE, Shankaran S, Bada H, Bauer CR, Whitaker TM, Lester BM. Transactional relations between caregiving stress, executive functioning, and problem behavior from early childhood to early adolescence. *Dev Psychopathol.* 2016 Aug;28(3):743-56. doi: 10.1017/S0954579416000286. PMID: 27427803

51. Sheinkopf SJ, Tenenbaum EJ, Messinger DS, Miller-Loncar CL, Tronick E, Lagasse LL, Shankaran S, Bada H, Bauer C, Whitaker T, Hammond J, Lester BM. Maternal and infant affect at 4 months predicts performance and verbal IQ at 4 and 7 years in a diverse population. *Dev Sci.* 2016 Oct 23. doi: 10.1111/desc.12479. [Epub ahead of print] PMID: 27774733

52. Salley B, Sheinkopf SJ, Neal-Beevers AR, Tenenbaum EJ, Miller-Loncar CL, Tronick E, Lagasse LL, Shankaran S, Bada H, Bauer C, Whitaker T, Hammond J, Lester BM. Infants' early visual attention and social engagement as developmental precursors to joint attention. *Dev Psychol.* 2016 Nov;52(11):1721-1731. PMID: 2776527

53. Gomez-Pomar E, Makhoul M, Westgate PM, Ibonia KT, Patwardhan A, Giannone PJ, Bada H, Jawdeh EG. Relationship Between Perfusion Index And Patent Ductus Arteriosus In Preterm Infants. *Pediatr Res.* 2017 Jan 18. doi: 10.1038/pr.2017.10. [Epub ahead of print]; PMID: 28099422

54. Gomez-Pomar E, Christian A, Devlin L, Ibonia KT, Concina VA, Bada H, Westgate PM. Analysis of the factors that influence the Finnegan Neonatal Abstinence Scoring System. *J Perinatol.* 2017 Apr 6. doi: 10.1038/jp.2017.40. [Epub ahead of print] PMID: 28383539

55. Khan SS, Sithisarn T, Bada HS, Vranicar M, Westgate PM, Hanna M. Urinary NT-proBNP levels and echocardiographic parameters for patent ductus arteriosus. *J Perinatol.* 2017 Dec;37(12):1319-1324. doi: 10.1038/jp.2017.139. Epub 2017 Sep 14. PMID: 28906496

56. Gomez Pomar E, Finnegan LP, Devlin L, Bada H, Concina VA, Ibonia KT, Westgate PM. Simplification of the Finnegan Neonatal Abstinence Scoring System: retrospective study of two institutions in the USA. *BMJ Open.* 2017 Sep 27;7(9):e016176. doi: 10.1136/bmjopen-2017-016176. PMID: 28963285

57. Sithisarn T, Legan SJ, Westgate PM, Wilson M, Wellmann K, Bada HS, Barron S. The Effects of Perinatal Oxycodone Exposure on Behavioral Outcome in a Rodent Model. *Front Pediatr.* 2017 Aug 25;5:180. doi: 10.3389/fped.2017.00180. eCollection 2017. PMID: 28971091
58. Gomez-Pomar E, Hatfield E, Garlitz K, Westgate PM, Bada HS. Vitamin E in the Preterm Infant: A Forgotten Cause of Hemolytic Anemia. *Am J Perinatol.* 2018 Feb;35(3):305-310. doi: 10.1055/s-0037-1607283. [Epub 2017 Oct 10] No abstract available. PMID: 29017181
59. Subedi L, Huang H, Pant A, Westgate PM, Bada HS, Bauer JA, Giannone PJ, Sithisarn T. Plasma Brain-Derived Neurotrophic Factor Levels in Newborn Infants with Neonatal Abstinence Syndrome. *Front Pediatr.* 2017 Nov 3;5:238. doi: 10.3389/fped.2017.00238. eCollection 2017. PMID: 29164087
60. Abu Jawdeh EG, Westgate PM, Pant A, Stacy AL, Mamilla S, Gabani A, Patwardhan A, Bada HS, Giannone P. Prenatal Opioid Exposure and Intermittent Hypoxemia in Preterm Infants: A Retrospective Assessment. *Front Pediatr.* 2017 Dec 6;5:23. Doi: 10.3389/fped.2017.00253. eCollection 2017

**ABSTRACTS PRESENTED AT SCIENTIFIC MEETINGS (over 150 abstracts).  
Recent Abstracts listed below.**

1. Reynolds EW, Reil-Romero RMS, Bada HS. Neonatal abstinence syndrome and cerebral infarction following maternal codeine use during pregnancy. Southern Society for Pediatric Research Annual Meeting, New Orleans, LA. Feb 2007.
2. Reynolds EW, Dai H, Bada HS. Maternal Poly-Drug Use in a Rural Setting. Presented (poster) at the Society for Pediatric Research Annual Meeting, Toronto, Canada. May 2007.
3. Reynolds EW, Reil-Romero RMS, Bada HS. Neonatal abstinence syndrome and cerebral infarction following maternal codeine use during pregnancy. Southern Society for Pediatric Research Annual Meeting, New Orleans, LA. Feb 2007.
4. Reynolds EW, Dai H, Bada HS. Maternal Poly-Drug Use in a Rural Setting. Presented (poster) at the Society for Pediatric Research Annual Meeting, Toronto, Canada. May 2007.
5. Abdu AT Reynolds EW, Bada, HS. Adrenal Hemorrhage in a Newborn. Southern Society for Pediatric Research New Orleans, LA Feb 2008.
6. Sanku G, Cibull ML, Bada HS, Reynolds EW. All That's Green Is Not Meconium. Presented at the Southern Society for Pediatric Research, New Orleans, LA, Feb 2008.
7. Reid T, Dai H, Reynolds EW, Granger DT, Bada HS. Opiates: A component of Polydrug Use By Rural Pregnant Women And Effects on Birth Growth Measurements. Presented at the Southern Society for Pediatric Research, New Orleans, LA Feb, 2008.

8. Bada HS, Das A, Hammond J, Bauer CR, Shankaran S, Lester B, LaGasse L, Whitaker T, Tan S, Higgins R. Childhood Behavior Problems After Prenatal Cocaine Exposure: Trajectories Through 11 Years and Early Prediction (Maternal Lifestyle Study). Presented at the Pediatric Academic Societies Meeting, Honolulu, Hawaii, May 4, 2008.
9. Bada HS, Das A, Hammond J, Bauer CR, Shankaran S, Lester B, LaGasse L, Whitaker T, Tan S, Higgins R. Prenatal Cocaine Exposure and Teacher Report of School Behavior Problems. Presented at the Pediatric Academic Societies Meeting, Honolulu, Hawaii, May 5, 2008.
10. Shankaran S, Bann C, Das A, Lester B, Bada H, Bauer C, LaGasse L, Higgins R. Identifying Risk for Obesity in Early Childhood: The Maternal Lifestyle Study (MLS). Presented at the Pediatric Academic Societies Meeting, Honolulu, Hawaii, May 5, 2008.
11. Sithisarn T, Nation L, Dai H, Legan SJ, Randall DC, Bada HS. Effect of Perinatal Oxycodone Exposure on Behavior in Weanling Rats, Pediatric Academic Societies Annual Meeting, Honolulu Hawaii, May 2008.
12. Abdu A, Bada HS, Granger DT, Reynolds EW, Mendiondo M. Occurrences of Late Infection in the Neonatal Intensive Care Unit: A 10-Year Experience. Presented at SSPR, New Orleans LA. February 2009.
13. Sanku G, Bada HS, DiSessa TG, Grabham J, Golekoh M, Reynolds EW. Echocardiographic Findings in Neonates with Pulmonary Hypertension. Presented (poster) at Pediatric Academic Societies Meeting. Baltimore MD. May 2009.
14. Abdu A, Bada HS, Granger DT, Reynolds EW, Mendiondo M. Late Onset Sepsis and Meningitis: A 10-Year Experience. Peds Res. Presented (poster) at Pediatric Academic Societies Annual Meeting. May 2009. Travel Awarded to Abdu, A..
15. Hong-McAtee I, Whitehead V, Crawford T, Grider D, Stevens S, Bada H, Kriss VM, Desai N. Thyroid Volume Increases with Gestational Age. Presented at the Pediatric Academic Societies Meeting, Vancouver Canada, May 2010, Electronic pub (E-PAS2010-1454.13)
16. 16 Sithisarn T, Charnigo R, Barron S, Wellman K, Legan S, Bada HS, Randall DC. Prenatal Oxycodone Exposure Affects the Cardiovascular Response to Acute Stress and Neurobehavior in the Offspring. Presented at the Pediatric Academic Societies Annual Meeting, Vancouver, Canada, May 2010 Electronic pub E-PAS2010.1471.223.
17. Reid T, Bendure L, Bada H, Crawford T, Mendiondo M. Comparing Drug Choices in Pregnant Women Living in Urban and Rural Areas. *Journal of Clinical Investigation*; 2011 59 (2): 455. Presented at the Southern Society for Pediatric Research Annual Meeting New Orleans, LA February 17-19, 2011.
18. Sithisarn T, Bada H, Crawford T, Mendiondo MS, England J, Legan S. Perinatal Oxycodone Exposure and the Effects on the HPA Axis Circuit and Its Response to Stress. *Journal of Clinical Investigation*; 2011 59 (2):526. Presented at the Southern Society for Pediatric Research Annual Meeting, New Orleans, LA, February 17-19 2011.

19. Hong-McAtee I, Whitehead V, Crawford T, Grider D, Stevens S, Mendiondo M, Bada H, Kriss VM, Desai N. Thyroid Volume in Premature Infants Using Serial Ultrasounds. Presented at the Pediatric Academic Societies Annual Meeting, Denver, Colorado, April 30, 2011. Electronic pub - E-PAS2011-1401.8
20. Reid TL, Bendure L, Bada H, Crawford T, Mendiondo M. Comparing Drug Choices in Pregnant Women Living in Urban and Rural Areas. Presented at the Pediatric Academic Societies Annual Meeting, Denver, Colorado, May 1, 2011. Electronic Pub: E-PAS2011-2914-200.
21. Sithisarn T, Bada H, Crawford T, Mendiondo MS, England J, Legan S. Perinatal Oxycodone Exposure and the Effects on the HPA Axis Circuit and Its Response to Stress. Presented at the Pediatric Academic Societies Annual Meeting, Denver, Colorado, May 1, 2011. Electronic Pub: E-PAS2011-2917-245.
22. Bada HS, Bann CM, Whitaker TM, Bauer CR, Shankaran S, Lester B, LaGasse L, Hammond J. Association Between Prenatal Cocaine/Other Drug Exposure and Attention Deficit/Hyperactivity Disorder (ADHD). Presented at the Pediatric Academic Societies Meeting, Hynes Convention Center, Boston, MA. April 28, 2012 Platform Session: Developmental & Behavioral Pediatrics: School Aged Children. E-PAS2012:1310.7
23. Sithisarn T, Bada H, Legan S. The Effects of Perinatal Oxycodone Exposure on the Hypothalamic-Pituitary-Adrenal Axis Circuitry. Presented at the Pediatric Academic Societies Meeting, Hynes Convention Center, Boston, MA. April 29, 2012. Poster session. Neonatology. E-PAS2012:2918.281
24. Ho MN, Agarwal A, Crawford TN, Grider D, Bada HS, Reynolds EW. Caffeine Effects on Oxygen Desaturations of Preterm Infants during Nutritive Feedings. Presented at the Pediatric Academic Societies Meeting, Hynes Convention Center, Boston, MA. April 28, 2012. Poster session. Neonatology - General. E-PAS2012:1534.578
25. Sithisarn T, Legan SJ, Bada HS, Wilson ME, The effects of Perinatal oxycodone exposure on limbic system controlling stress axis. Presented at the Pediatric Academic Societies Meeting, Developmental Biology Session, May 6, 2013 Walter E. Washington Convention Center.
26. Bada HS, Sithisarn T, Li Y, Capilouto G, Gibson J, Desai N, Breheny P. Clonidine as a single drug therapy in neonatal abstinence: a pilot study ; Southern Society for Pediatric Research new Orleans, LA, February 2014.
27. Radulescu A, Wallace C, Li Y, Anderson A, Bada H. Association between BMI and Biomedical markers in obese children. Southern Society for Pediatric Research New Orleans, LA, February 2014.
28. Radulescu A, Wallace C, Li Y, Anderson A, Bada H. Characteristics of obese children from urban and rural areas. Southern Society for Pediatric Research New Orleans, LA, February 2014.
29. Sithisarn T, Caldwell R, Li Y, Gibson J, Garlitz K, Capilouto G, Bada, HS. Morphine versus clonidine as a single drug therapy in Neonatal Abstinence Syndrome: A pilot

- Study. Presented at the Pediatric Academic Societies Meeting, Neonatal Medicine, Clinical Trials Section. Vancouver, CA, May 2014
30. Khan SS, Sithisarn T, Bada H, Vranicar M, Hanna M, Li Y. Urinary NT-proBNP levels and echocardiographic parameters for patent ductus arteriosus. *Journal of Investigative Medicine* 2015, 63 (2): 418. Presented (platform session) at the Southern Society for Pediatric Research February 27, 2015, New Orleans, LA.
  31. Radulescu A, Wallace C, Li Y, Killian M, Bada H. Association between Vitamin D level and other biomedical markers in obese children and adolescents. *Journal Clinical Investigative Medicine* 2015, 63 (2) 474. Presented (platform session) at the Southern Society for Pediatric Research, New Orleans, LA, February 28, 2015.
  32. Khan S, Sithisarn T, Vranicar M, Li Y, Bada, H, Hanna M. Urinary NT-proBNP levels and echocardiographic parameters for patent ductus arteriosus, presented (platform session) at Pediatric Academic Societies Meeting, Biomarkers in Pediatric Clinical Translational Research, San Diego Convention Center, Dan Diego, April 26, 2015 Abstract number 2300.7 published on line access date: 06/19/2015. [http://www.abstracts2view.com/pas/lookup\\_view.php?word=Bada&where=authors&return=%2Fpas%2Fauthorindex.php%3Fnum%3D1](http://www.abstracts2view.com/pas/lookup_view.php?word=Bada&where=authors&return=%2Fpas%2Fauthorindex.php%3Fnum%3D1)
  33. Concina VA, Samide A, Bada H, Gomez E. Comparing diagnostic criteria for bronchopulmonary dysplasia (BPD) of Vermont Oxford network (VON) to the National Institute of Child Health and Development (NICHD) Neonatal Network. *J Investig Med* 2016; 64:604, presented at the Southern Society for Pediatric Research, Feb. 18, 2016 at New Orleans, LA
  34. Ibonia K, Bada H, Bhandary P, Gomez E, Westgate P, Patwardhan A, Shanbacher B, Abu Jawdeh E. Correlation of changes in perfusion Index and intermittent hypoxemia with blood transfusion in preterm infants. *J Investig Med* 2016; 64:610, presented at the Southern Society for Pediatric Research, Feb. 18, 2016 at New Orleans, LA
  35. Christian A, Ibonia K, Westgate P, Gomez E, Bada H. Variability of the Finnegan Scoring System presented as platform at the Southern Society for Pediatric Research, Feb. 18, 2016 at New Orleans, LA
  36. Gomez Pomar E, Finnegan LP, Ibonia KT, Concina VA, Bada H, Westgate PM. Simplified Finnegan Neonatal Abstinence Score for Efficient Assessment. Platform presentation at the Pediatric Academic Societies Meeting, session of Pediatric Therapeutics, Saturday, April 30, 2016, 9:30 am; Baltimore Convention Center, Baltimore, MD. E-PAS2016; 1220.7 [http://www.abstracts2view.com/pas/view.php?nu=PAS16L1\\_1220.7](http://www.abstracts2view.com/pas/view.php?nu=PAS16L1_1220.7)
  37. Ibonia KT, Bada H, Gomez Pomar E, Bhandary P, Westgate P, Patwardhan A, Schanbacher B, Abu Jawdeh EG. Changes in Perfusion Index and Intermittent Hypoxemia Following Red Blood Cell Transfusion in Preterm Infants. Poster Session Pediatric Academic Societies Meeting, Session on Neonatology: Neonatal Pulmonology: Steroids and Surfactant; Monday, May 2, 2016, Baltimore Convention Center, Baltimore MD. E-PAS2016:3828.268 [http://www.abstracts2view.com/pas/view.php?nu=PAS16L1\\_3828.268](http://www.abstracts2view.com/pas/view.php?nu=PAS16L1_3828.268)

38. Concina VA, Schneider D, Westgate, P, Bada H, Khan S. Predictive Factors in the Development of Moderate to Severe Bronchopulmonary Dysplasia (BPD) in Preterm Infants. Poster Session Pediatric Academic Societies Meeting, Session on Neonatology: Neonatal Pulmonology: Prediction and Genetics of BPD. May 2, 2016, Baltimore Convention Center, Baltimore MD. E-PAS2016:3830.279  
[http://www.abstracts2view.com/pas/view.php?nu=PAS16L1\\_3830.279](http://www.abstracts2view.com/pas/view.php?nu=PAS16L1_3830.279)
39. Gomez Pomar E, Makhoul M, Westgate, PM, Ibonia KT, Patwardhan A, Schanbacher B, Bada H, Abu Jawdeh, E. Perfusion Index Does Not Diagnose Hemodynamically Significant Patent Ductus Arteriosus in Preterm Infants. Poster Session Pediatric Academic Societies Meeting, Neonatal Cardiology: Neonatal cardiovascular physiology. May 2, 2016, Baltimore Convention Center, Baltimore MD. E-PAS2016:3859.542  
[http://www.abstracts2view.com/pas/view.php?nu=PAS16L1\\_3859.542](http://www.abstracts2view.com/pas/view.php?nu=PAS16L1_3859.542)
40. Concina VA, Samide A, Gomez Pomar E, Bada H. Comparing Diagnostic Criteria for Bronchopulmonary Dysplasia (BPD) of Vermont Oxford Network (VON) to the National Institute of Child Health and Development (NICHD) Network. Poster Session Pediatric Academic Societies Meeting, Session on Neonatology: NICU Practices and Procedures II. May 2, 2016, Baltimore Convention Center, Baltimore MD. E-PAS2016:3863.579  
[http://www.abstracts2view.com/pas/view.php?nu=PAS16L1\\_3863.579](http://www.abstracts2view.com/pas/view.php?nu=PAS16L1_3863.579)
41. Sithisarn T, Bada H, Westgate P, Legan S. Postnatal Treatment With Morphine Following Prenatal Opiate Exposure Increases Brain Cell Death Compared to Clonidine. Platform Session, Pediatric Academic Societies Meeting, Session on Neonatology Neurology. May 2, 2016, Baltimore Convention Center, Baltimore MD. E-PAS2016:4475.8  
[http://www.abstracts2view.com/pas/view.php?nu=PAS16L1\\_4475.8](http://www.abstracts2view.com/pas/view.php?nu=PAS16L1_4475.8)
42. Subedi L, Huang H, Pant A, Westgate P, Bada H, Bauer J, Giannone P, Sithisarn T. Prenatal Opioid Exposure Alters Cortisol Levels in Early Postnatal Period. Poster presentation, Session on Neonatal Neurology Petal Exposures and Neonatal Abstinence at Pediatric Academic Societies Meeting, May 5, 2018, Toronto, Canada.
43. Subedi L, Huang H, Pant A, Westgate P, Bada H, Bauer J, Giannone P, Sithisarn T. The Effect of in Utero Opioid Exposure on Neurotrophin-3 Levels in the Newborn. Poster presentation, Session on Neonatal Neurology Petal Exposures and Neonatal Abstinence at the Pediatric Academic Societies Meeting, May 5, 2018, Toronto, Canada.
44. Strelow F, Westgate P, Pant A, Abhijit P, Bada H, Giannone P, Desai N, Abu Jawdeh E. Relationship between Postnatal Growth, Caloric Intake and Intermittent Hypoxemia (IH) in Preterm Infants. Poster presentation at the session on Neonatology: Endocrine and Growth at the Pediatric Academic Societies Meeting, May 6, 2018, Toronto, Canada.
45. Radulescu A, Westgate P, Bada H. Young Children with Obesity are at High Risk for Diabetes, Fatty Liver Disease and 25-OH Vitamin D3 Deficiency. Poster presentation at the Session on Obesity and Disordered Eating: Implications for

Cardiometabolic Risk, GUT, and Bone at the Pediatric Academic Societies Meeting, May 6, 2018, Toronto, Canada.

46. Robl J, Ferrell E, Ferguson T Bada H. Changing Pattern of Sudden Unexpected Infant Death (SUID) in the Midst of Increasing Numbers of Babies born to Mothers with Opioid Dependence. Platform Presentation at the Session of Epidemiology 1 the Pediatric Academic Societies Meeting, May 7, 2018, Toronto, Canada.
47. Bada H. The Substance Exposed Infant: NAS – Continuing Care Needs and Outcomes after Discharge, Panel Discussion. Follow-up Club at the Pediatric Academic Societies Meeting, May 7, 2018, Toronto, Canada.
48. Robl J, Jewell T, Bada H. Neonatal Abstinence Syndrome (NAS) Surveillance Demonstrates Prevention Opportunities. Poster Presentation at the Session of Epidemiology: Potpourri, at the Pediatric Academic Societies Meeting, May 7, 2018, Toronto, Canada.
49. Mirsky E, Sithisarn T, Westgate P, Desai N, Edens M, Bada H. Neurodevelopmental Outcomes of Infants with Neonatal Opioid Withdrawal Syndrome are Compounded by Number of Additional Drugs Used During Pregnancy and Discharge Placement. Poster Presentation at the Neonatal Follow-up Session at the Pediatric Academic Societies Meeting, May 7, 2018, Toronto, Canada.
50. Czack S, Bada H. The Effect of Combining Opioid and Non-Opioid Drugs During Pregnancy on an Infant's Need for Neonatal Abstinence Syndrome Treatment. Poster Presentation at the NICU Practices and Procedures 3 Session at the Pediatric Academic Societies Meeting, May 8, 2018, Toronto, Canada.

#### **PUBLICATIONS (OTHER):**

- Bada HS, Sumner DS: Commentary: Transcutaneous Doppler ultrasound: Pulsatility index, mean flow velocity, end diastolic flow velocity, and cerebral blood flow. *Journal of Pediatrics* 104(3):395-397, 1984.
- Bada HS, Korones SB, Green RS, Pourcyrous M, Leffler CW, Magill HL, Arheart K, Fitch CW, Anderson GD, Somes G, Tullis K, Campbell J: Reply: Indomethacin and ischemic brain injury in neonates. (Letter) *Journal of Pediatrics* 116(5):840, 1990.
- Perry EH, Bada HS, Ray JD, Korones SB, Arheart KL, Magill HL: Reply: Blood pressure and intraventricular hemorrhage in premature infants. (Letter) *Pediatrics* 86(6):1006-1007, 1990.
- Bada HS: Neonatal problems associated with prematurity. *Mid-South Perinatal Perspectives* 2(3):August 1991.
- Pourcyrous M, Bada HS, Korones SB, Baselski V, Wong SP: Sepsis plus C-reactive protein. (Reply) *Pediatrics* 93(4):693-694, 1994.
- Bada HS: Commentary. Routine indomethacin prophylaxis: Has the time come? *Pediatrics* 98(4):784-785, 1996.
- Bada-Ellzey HS (Guest Editor): Fetal and Neonatal Physiologic Measurements. *Clinics in Perinatology* 26(4):December 1999.

- Bada HS: What We Should Know About Women Who Use Illegal Drugs During Pregnancy. Kentucky Women's Health eNewsletter June 2002

#### **COMMITTEES AND OFFICES HELD:**

- 9/80-10/01: Faculty Advisor, Pediatric Residency Training Program, The University of Tennessee, Memphis LeBonheur Children's Medical Center,
- 9/81-7/86: Member, Infection Control Committee, Regional Medical Center at Memphis,
- 3/89-10/01: Member, Infection Control Committee, Regional Medical Center at Memphis,
- 9/82-10/01: Interviewer, Committee on Resident Education, The University of Tennessee, Memphis- LeBonheur Children's Medical Center, Combined Pediatric Residency Training Program,
- 1982-1985: Faculty Advisor, College of Medicine, The University of Tennessee, Memphis,
- 5/1985: Member, Thesis Committee (Anita Stanford), "Comparison of Blood Pressure Methods in Very Low Birth Weight Infants," Master's Degree in Maternal-Child Nursing, The University of Tennessee, Memphis,
- 7/85-6/86: Member, Research Committee, Department of Obstetrics and Gynecology, The University of Tennessee, Memphis,
- 8/85-8/90: Member, The University of Tennessee, Memphis, Institutional Review Board,
- 12/85: Member, Thesis Committee (Christine Walsh), "Increased TcPO<sub>2</sub> to Control Hypoxemia Due to ET Suctioning in Neonates," Master's Degree in Maternal-Child Nursing, The University of Tennessee, Memphis,
- 3/86-9/86: Member, Selection Committee for Assistant Vice-Chancellor for Research, The University of Tennessee,
- 8/86-2/89: Chairman, Infection Control Committee, Regional Medical Center at Memphis,
- 2/87-88: Member, Council on Research, The University of Tennessee, Memphis,
- 8/87-6/00 Member, Committee on Resident Education (CORE Committee), Department of Pediatrics, The University of Tennessee, Memphis,
- 11/87: Member, Thesis Committee (Nancy Lakey), "Maternal Stimulation and Oxygenation in Ventilated Preterm Infants," Master's Degree in Maternal-Child Nursing, The University of Tennessee,
- 1/88-8/89: Member, Search Committee for Chair of Department of Biomedical Engineering, The University of Tennessee, Memphis.
- 5/93: Member, Thesis Committee (Glenda Shriver), "Bag Versus Diaper Urine Osmolality Values," Master's Degree in Maternal-Child Nursing, The University of Tennessee, Memphis,

- 12/93: Member, Thesis Committee (Kathryn McAndrew), "Gestational Age Assessment of Newborn Infants Using the New Ballard Score," Master's Degree in Maternal-Child Nursing, The University of Tennessee, Memphis,
- 8/93: Ad Hoc Member, Dissertation Committee (Kristopher L. Arheart), "A Hierarchical Linear Model Analysis and Very Low Birth Weight Infants' Blood Pressure," Ed.D. in Foundations of Education Research Methodology and Statistics, The University of Tennessee, Memphis,
- 1994: Member, Search Committee for Chair of Department of Obstetrics and Gynecology, The University of Tennessee, Memphis,
- 6/96: Chair, Thesis Committee (Claudia Duncan), "Behavioral Outcomes in Children With IVH at School Age," Master's Degree in Maternal-Child Nursing, The University of Tennessee, Memphis,
- 12/96: Chair, Thesis Committee (Linda Mosby), "Stress in Caregivers of Premature Infants," Master's Degree in Maternal-Child Nursing, The University of Tennessee, Memphis,
- 12/97: Member, Thesis Committee (Robert Kundich), "Clinical Assessment of Ventricular Depolarization Rhythmicity in Premature Infants," Master of Science Degree, The University of Tennessee
- 1/97: Member, SCRCH Maternal and Infant Health Committee, Community Development Section, Memphis/Shelby County Regional Office, Tennessee Department of Health
- 3/97: Member, Pediatric Biomedical Engineering Committee, The University of Tennessee, Memphis
- 11/98: Member, Bright Start Policy Council, Porter-Leath Early Head Start Program
- 12/98-10/01: Member, Case Management Committee, Regional Medical Center at Memphis,
- 12/98: Member, Thesis Committee (Debra Stubblefield), Comparison of Two Types of Glucose Testing in Neonates, Master of Science Degree in Maternal-Child Nursing, The University of Tennessee
- 12/98: Member, Thesis Committee (Tracey Hansen), Infusion Methods of Amikacin in Neonates: Intravenous Retrograde and Syringe Pump, Master of Science Degree in Maternal-Child Nursing, The University of Tennessee, Memphis
- 12/98: Member, Thesis Committee (Dana Bray), Risk Factors of Nephrocalcinosis in Preterm Infants, @ Master of Science Degree in Maternal-Child Nursing, The University of Tennessee, Memphis
- 5/98: Member, Honor's Thesis Committee (Anna Fong), Primary Caregiver's Satisfaction in Healthcare Planning and Barriers to the Healthcare System, The University of Memphis
- 9/99-10/01: Member, Committee on Academic Appointments and Promotions, The University of Tennessee, Memphis, College of Medicine
- 9/99: Member, : Advisory Search Committee for Dean of the College of Nursing, The University of Tennessee, Memphis,

- 12/00: Member, Thesis Committee (Patricia Wallin), Relationship Among Axillary Temperature and Incubator Ambient Temperature for Infants Weaning to Open Beds, Master of Science Degree in Maternal-Child Nursing, The University of Tennessee, Memphis,
- 6/01: Member, Thesis Committee (Valerie Blatnik), The Effects of Antenatal Steroids on Intraventricular Hemorrhage in Infants Less Than 34 Weeks, Master of Science Degree in Maternal-Child Nursing, The University of Tennessee, Memphis,
- 9/01: Member, Thesis Committee (Tiina Rantonen), Antenatal MgSO<sub>4</sub> Exposure and the Preterm Infant, Research Centre of Applied and Preventive Cardiovascular Medicine, University of Turku, Turku, Finland
- 2002: Member, OB/Gyn Chairman Search Committee, the College of Medicine, the University of Kentucky.
- 2003-2008: Member, Perinatal Services Management Committee, University of Kentucky Hospital
- 2003-2010: Member, Children's Services Management Committee, University of Kentucky Children's Hospital
- 2003-2008: Member, Committee of Faculty Appointments, Appeals, Promotion and Tenure, the College of Medicine, the University of Kentucky
- 2003: Member, Committee on Hospital Incentive Plan: the 6-Year Study, the College of Medicine, the University of Kentucky
- 2003: Member, Pediatrics Chairman Search Committee and 6-Year Review Committee, the College of Medicine, the University of Kentucky
- 2003-present: Member, Kentucky Perinatal Association, Board of Directors
- 2003: Member, Clinical Enterprise Strategic Planning and Growth, 2003
- 2004, May 1: Co-Chair, Special Session, Poster Symposium, Pediatric Academic Societies Annual Meeting
- 2004, May: Member, March of Dimes Prematurity Steering Committee, May, 2004.
- 2004, August: Member "Expert Panel to Establish Protocol for the Medical Treatment of Opiate Addicted Pregnant Women"
- 2003: Member, Internal Medicine 6-Year Review Committee
- 2012: Abstract reviewer: Pediatric Academic Societies: 2012
- 2013: Abstract reviewer: Pediatric Academic Societies Meeting 2013
- 2013: Moderator: Pediatric Academic Societies may 2013
- 2014: Member: Capstone committee Amanda Anderson, MPH: "A model to predict risk mortality in very low birth weight infants born at the University of Kentucky between January 2002 and December 31, 2006."
- 2014: Member: Capstone Committee;, Heather Flannagan, MPH; Effects of Providing Breast Milk to Preterm infants in the NICU.
- 2015: Chair, Master of Science Committee: Safdar Khan, MD, MS in Medical Sciences (Clinical translational pathway); "Urinary NT-proBNP and Patent Ductus Arteriosus; University of Kentucky CCTS.

- 2015, April 25: Moderator: Pediatric Academic Societies Annual Meeting: Neonatal practice and procedures Poster Facilitator: Pediatric academic Societies Meeting; poster session: Follow-up; April 27, 2015
- 2015: Abstract reviewer for the Pediatric Academic Societies Meeting 2016
- 2016: Chair Thesis (final exam) committee for MS in Medical Sciences (Clinical and Translational Science): Enrique Gomez-Pomar; “Perfusion Index in the presence of patent ductus arteriosus”
- 2016: Chair Thesis (final exam) committee for MS in Medical Sciences (Clinical and Translational Science): Vanessa Concina “Perinatal factors and NT-proBNP as predictors of bronchopulmonary dysplasia”
- 2016: Chair Thesis (final exam) committee for MS in Medical Sciences (Clinical and Translational Science): Katrina Ibonia: “Perfusion Index and intermittent hypoxemia following blood transfusion in preterm infants”
- 2016: Moderator/Poster facilitator, Pediatric Academic Societies Annual Meeting May 2016.
- 2017: Abstract reviewer for the Pediatric Academic Societies Meeting 2017
- 2018: Abstract Reviewer for The Pediatric Academic Societies Meeting 2018

#### **RESEARCH AND OTHER EXTERNAL SUPPORT:**

1. Comparative Efficacy Between Theophylline and Caffeine in the Treatment of Apnea of Prematurity (including technician support)
  - a. Amount: \$13,028 - 1977-1978
  - b. Amount: \$16,708 - 1978-1979
2. Noninvasive Measurement of Blood Velocity in the Newborn
  - a. Amount: \$5,008
  - b. Awarded by National Foundation March of Dimes
  - c. Dates: December 1977-January 1979
3. Perinatal Outreach Education Program (Medical Service Center)
  - a. Awarded by National Foundation March of Dimes
  - b. Amount: \$14,000
  - c. Dates: January 1978-December 1978
4. Noninvasive Measurement of Blood Velocity and Cerebral Blood Flow in the Newborn
  - a. Amount: \$2,085 - 1978-1979
  - b. Amount: \$2,700 - 1979-1980
5. Relationship to Therapeutic Response to Serum and/or Salivary Levels of Caffeine and Theophylline to Apnea of Prematurity (including technician support)
  - a. Amount: \$17,228
  - b. Dates: 1979-1980
6. Cerebral Blood Flow Velocity Studies in Neonates
  - a. Awarded by Illinois Heart Association
  - b. Amount: \$20,000

- c. Dates: 1979-1981
- 7. Evaluation of Liposyn 20% as a Calorie Source
  - a. Awarded by Abbott Laboratories
  - b. Dates: January 1980-December 1980 (Completed in six months)
- 8. Cerebral Blood Flow Changes and Intraventricular Hemorrhage
  - a. Awarded by March of Dimes Birth Defects Foundation
  - b. Amount: \$39,024
  - c. Dates: April 1, 1981-March 31, 1983
- 9. Intraventricular Hemorrhage: Pathogenesis and Outcome
  - a. Awarded by National Institutes of Health NINDS (Program Director)
  - b. Amount: \$1,219,049
  - c. Dates: April 1, 1985-March 31, 1988
- 10. Autonomic Nervous System Functioning in Ill Neonates
  - a. Awarded by Department of Obstetrics and Gynecology Special Education
  - b. The University of Tennessee, Memphis
  - c. Amount: \$9,995
  - d. Dates: October 25, 1994-October 24, 1995
- 11. Cooperative Multicenter Network of Neonatal Intensive Care Units
  - a. Awarded by National Institutes of Health (Co-PI)
  - b. Amount: \$2,197,374 (to date)
  - c. Dates: April 1, 1991-March 31, 1996
  - d. Renewal: April 1, 1996-March 31, 2001
- 12. Effects of Maternal Lifestyle During Pregnancy on Acute Neonatal Events and Long-Term Neurodevelopmental Outcome of Infants: A Prospective, Multisite, Controlled Clinical Trial Awarded by Multicenter Network of Neonatal Intensive Care Units-- National Institute of Child Health and Development, National Institute of Drug and Alcohol Administration, Office of Treatment Implementation, and Administration for Children, Youth, and Families (Site Principal Investigator)
  - a. Amount: \$500,000/year
  - b. Dates: April 1, 1991-March 31, 1996
  - c. Renewal: April 1, 1996-March 31, 2001
- 13. Abandoned Infants Assistance Program
  - a. Awarded by Department of Health and Human Services, Children's Bureau,
  - b. Administration for Children and Families
  - c. Amount: \$450,000/year
  - d. Dates: September 30, 1996-September 29, 2000
- 14. U 10 HD 426 38 (Bada: PI) 4/1/2002 – 3/31/2008 NIH/NICHD \$500, 000/Yr The major goals of this project are to determine the long-term effects of in utero exposure to cocaine and or opiates in a cohort of children followed since birth, at 8 to 11 years of age.
- 15. Infant Intensive Care Contract (Bada: PI) 07/01/07 – 06/30/08 and yearly to 12/31/2011.

- a. Commonwealth of Kentucky Cabinet for Health Services Department of Adult and Child Health Improvement \$384,350. The major goal of the program is to evaluate outcomes in the delivery of neonatal intensive care and to provide outreach education for health care professionals.
16. Effects of Maternal Periodontal Inflammation on Infant Neurodevelopment. 01/2007-01/2009
- a. NIH/NIDCR 0U1 DE014338 (subcontract) \$173,235
  - b. PI: Michalowicz; University of KY site PI: Novak
  - c. The study involves long term follow-up of children of mothers enrolled during pregnancy for treatment of periodontal inflammation. Role: Co-site PI and Follow-up investigator
17. Gene Targets for Prevention of IVH NINDS (L. Ment PI) 04/01/2007-03/31/2012
- a. Purpose: To Identify Genes that are likely associated with increased risk of Grades 3 and 4 IVH.
  - b. Role: Site PI (5%)
18. 9U10 DA024128-06 (Bada: PI) 4/1/2007 – 3/31/2011 \$578,832/yr; 04/01/2011 – 3/31/12 (no cost extension) The Maternal Lifestyle Study- Phase 5: 12-15 year follow-up
- a. The major goals of this project are to determine the long-term effects of in utero exposure to cocaine and or opiates in a cohort of children followed since birth, at 8 to 15 years of age.
19. 1K23 HD50581-01A1 (Reynolds: PI) 7/01/2006 -06/30/2011 NIH/NICHD 100,000/year
- a. Cervical (neck) Auscultation during Infant Feeding
  - b. The major goal of the study is to evaluate infant suck-swallow-breath rhythms in preterm, term, and those preterm and term infants with chronic lung disease and brain injury.
  - c. Role: Primary Mentor
20. Children's Miracle Network Research Grant: \$20,000. The purpose of this study is to obtain preliminary data on comparison between morphine and clonidine for treatment of neonatal abstinence syndrome, a randomized trial. January 2011-December 2014.
21. Children's Miracle Network grant \$10,000. The purpose of this grant is to determine the genetic SNPs that may be associated with response to treatment of infants with neonatal abstinence syndrome. January 2015 to Dec 2105.
22. National Institute on Drug Abuse: "Control Abstinence and Lessen Morbidities in in Prenatal Opiate Medication Exposure; Principal investigator, \$3,276,796. The purpose of this study is to determine neurobehavioral and long-term outcomes on infants treated with opiate versus non-opiate (clonidine) for neonatal abstinence syndrome. (applied for: not funded 19thpercentile).
23. 1U24HD090874-01 (Bada and Harris: MPI) The application was submitted from the University of Kentucky (UK) and Westat, Inc. in response to RFA-OD-16-002, Data Coordinating and Operations Center for the IDeA States Pediatric Clinical Trials

Network (U24). The goal of the application is to serve as the Data Coordinating and Operations Center (DCOC) for the multicenter clinical program, the IDeA States Pediatric Clinical Trials Network (ISPCTN). Not funded

- 24.1 R01 DA043519-01 (Bada/Leggas:MPI). The objective of this study is to evaluate the effectiveness of clonidine, an  $\alpha_2$  adrenergic receptor agonist, as a treatment for neonates with NAS, in a randomized clinical trial. 2017-2022; Funded

**VISITING PROFESSORSHIPS AND INVITED LECTURES** (over 200 invited lectureships, only recent lectureships listed)

1. March 29, 2012. The Drug Dependent Newborn (Web Cast:., This broadcast is made possible through a partnership with the Multijurisdictional Counterdrug Task Force Training Program (MCTFT), St. Petersburg College and the Florida National Guard.
2. April 16, 2012. "Neurological Assessment of the Newborn Infant," Guest lecturer Physician Assistants Program, University of Kentucky
3. June 5, 2012, Long-term Outcomes of Children With Neonatal Abstinence Syndrome. Kentucky Perinatal Association Annual Conference, Lake Cumberland, KY
4. September 29, 2012. "Prenatal drug Exposure," Plenary session, University of Kentucky Training Resource Center, Crowne Plaza, Louisville, KY.
5. October 3, 2012: "Prenatal Substance Exposure," Member, Panel Discussion. Division of Neonatology, University of Kentucky.
6. October 12, 2012. "Prenatal Drug Exposure: Role of Protective Factors on Behavior Outcomes"
7. University of Vermont, Department of Psychiatry Grand Rounds, Burlington, Vermont.
8. December 14, 2012. Transitioning from NICU to Home/Needs of the Infant at the Florida Statewide Summit: Prescription Drug Abuse, Tampa Florida
9. March 1, 2013: The governor's Summit on Infant Mortality: Neonatal abstinence syndrome
10. March 2, 2013: Neonatal Abstinence Syndrome. Training Resources for Foster parents of Medically fragile children, Kentucky Training Resource Center. Lexington, KY
11. March 14, 2013. Long term outcomes on Neonatal Abstinence Syndrome at the Conference on Substance Exposed Pregnancies: Understanding the Impact on Mothers, Infants, and Caregivers (March 13-14, 2013, Louisville KY).
12. May 17, 2013: Neonatal Abstinence Syndrome Workshop: in Contemporary Pediatrics annual conference, Lexington, KY
13. June 4, 2013. Developmental Outcomes of Preterm Infants. Kentucky Perinatal Association 26th Annual Educational Conference, Lake Cumberland, KY
14. September 13, 2013. Long-term Outcomes of Prenatal Drug Exposure: Is There Anything the Community Can Do? East Tennessee Children's Hospital Conference,

The Hidden Epidemic, Living with Neonatal Abstinence Syndrome (NAS) and What the Future Holds. Knoxville, TN.

15. October 10, 2013: The infant with prenatal substance exposure. What happens after nursery discharge? Operations PAR Organization, Pinellas County Florida
16. October 10, 2013. Long-term outcomes after prenatal drug exposure. Dinner Meeting of Neonatologists Orlando, FL.
17. September 24, 2014. Consequences of prenatal opiate and other drug exposures. Pikeville Regional Conference at Pikeville Medical Center, Pikeville KY.
18. October 1, 2014 Thomas Pauly Excellence in Neonatology Lectureship, Non-opiate treatment of neonatal abstinence syndrome. Hilary Boone Center, Lexington, KY
19. October 2, 2014 Pediatrics Grand Rounds: Neonatal Interventricular Hemorrhage State of the Art Department of Pediatrics University of Kentucky
20. April 6, 2015. Long Term Outcomes of Infants with Neonatal Abstinence Syndrome. National Rx Drug Abuse Summit, Atlanta GA.
21. July 18, 2015: Longterm outcomes on infants with neonatal abstinence syndrome: Drug Summit, Phoenix, AZ
  
22. October 1, 2015: Outcomes of infants exposed to opiates in utero: Substance abuse in Pregnancy Conference, Louisville KY
23. October 23, 2015. Scholarly activity during fellowship and the Center for Clinical And Translational Science, Organization of Neonatal-Perinatal Program Directors Meeting, Washington D.C.
24. October 29, 2015: The long term outcomes of children after in utero opiate exposure; Orange County Drug Summit, Orlando Florida.
25. March 20, 2016. National Drug Summit, Atlanta Georgia. Factors affecting outcomes of children with prenatal opiate exposure.
26. July 19, 2016. Neonatal abstinence syndrome. Conference of the National Association of Drug Diversion Investigators, sponsored by the Office of Inspection General, Frankfort, KY
27. March 17, 2017. Outcomes of Infants After Prenatal Drug Exposure. Key note Speaker, Warren County Coalition Conference, Lord Fairfax Community College, Middletown, Virginia
28. March 17, 2017. Early Intervention Services for Children With Prenatal Drug Exposure. Warren County Coalition Conference, Lord Fairfax Community College, Middletown, Virginia
29. June 5, 2017. Maternal and Child Health in the Commonwealth. Dr. Patricia Nicol Lectureship. Kentucky Perinatal Association 30th Annual Perinatal Educational Conference, Lake Cumberland, KY
30. November 10, 2017. Neonatal Abstinence Syndrome. Longitudinal Studies and Long-term Outcomes. Ohio River Valley Addiction Research Consortium (ORVARC). Northern Kentucky University, Highland Heights KY
31. January 10, 2018. Post Discharge outcomes of Infants with NAS. Panel Discussion. NIDA workshop. Rockville, Maryland

32. April 9-10, 2018. Developmental Impacts of Opiate Use in Pregnancy Workshop, Chair and Panelist (Post discharge outcomes, Long-term Developmental Outcomes, Balance of Risks and Protective factors). SAMHSA, Rockville. Maryland

**CURRENT RESEARCH ACTIVITIES:**

1. Longitudinal long-term follow-up of children (until school age) exposed to cocaine in utero compared to their controls (group-matched by birth weight, gestational age, race, sex, maternal age, and alcohol intake during pregnancy)
2. Predictors of ADHD after prenatal substance exposure
3. Heart rate variability analyzed as to frequency domain and power spectra to determine integrity of autonomic nervous system control in infants with prenatal drug exposure.
4. Comparison of opiate versus non-opiate treatment of neonatal abstinence syndrome.
5. Outcomes of children born to mothers abusing painkillers.
6. Predicting bronchopulmonary dysplasia from perinatal variables and respiratory status at 28 days postnatal age.
7. Finnegan Scoring in Neonatal Abstinence syndrome: 1) simplification and prospective evaluation of its clinical application and 2) factors affecting variability of the scoring system
8. Developmental outcomes of children with NAS

## **Kentucky Maternal and Child Health Evidenced Informed Strategies**

The Kentucky Division of Maternal and Child Health has developed Evidence Informed Strategies in order to assure that Title V funds provided to the local health departments (LHDs) are used to address the priority needs identified in the 2015 Title V Needs Assessment. These strategies are developed into “Packages” and each LHD chooses packages to implement based on their community needs each state fiscal year. Each package includes the following information:

- Goal
- Objective
- Target Contacts
- Activities
- Training Requirement
- Reporting Requirements, Allowable Events and Activities
- Approved Materials/Resources
- Allowable Expenses
- Expenses Not Allowable

The packages are modified each state fiscal year (July 1 – June 30) based on feedback from LHDs and emerging issues. For example, we have identified teen suicide as an emerging issue of concern in our state so suicide prevention activities have been added to a package. Each LHD must select at least one package that focuses on infant mortality, and chooses between two and five total packages. Required reporting is reviewed on a monthly basis by Division staff. Program staff and the Title V Director discuss a quarterly review of all activities and expenses. The packages that were available for LHDs to select from for FY18 were:

- Prenatal Care Tracking
- Giving Infants and Families Tobacco-free Starts (GIFTS)
- Healthy Babies are Worth the Wait
- Safe to Sleep for Child Care Providers
- Safe to Sleep for Community Partners (attached as an example)
- Cribs for Kids for Community Partners
- Prevention of Abusive Head Trauma
- Fluoride Varnish for Children through Fifth Grade
- Coordinated School Health
- 100% Tobacco Free Schools (attached as an example)
- Bullying and Suicide Prevention for Schools and Communities
- Healthy People Active Communities

Each LHD has a designated MCH Coordinator who assures quality program activities are implemented for the MCH populations within their service areas. The

LHDs have reported contacts with numerous community agencies (including schools, child care providers, health care providers, hospitals, private businesses, courts, churches and community-based organizations). These collaborations strengthen innovative MCH activities in local communities and increase sustainability at the local level.

Secondary to poor engagement per reported activities from LHDs and the state tobacco cessation team, the GIFTS package was removed as a choice for FY19. The Prenatal Tracking package was revised to be a Prenatal Referral Package with emphasis on an assessment with the pregnant woman who presents to the LHD and referral to available resources in the LHD and community.

**FY19 MCH Goal: Perinatal/Infant Mortality Package**  
**Activity Code #201: Safe to Sleep for Community Partners**

**Goals:** Reduce infant mortality from unsafe sleep practices with the assistance of community partners/stakeholders.

**Objective:** LHD staff will educate community partners about teaching safe sleep using most recently recommended practices by the American Academy of Pediatrics (AAP). Community partners will then provide their clients with education and the most current materials available. By promoting safe sleep practices through community partners, LHD will reduce the number of infant deaths due to bed-sharing and other dangerous sleep practices within their service area.

**Target Contacts (options, not expected to choose all):**

- Nurse Managers of Local Birthing Hospitals/L&D units
- Office Managers of Local Medical Providers
- School Principals/FRYSC Directors
- Leaders/facilitators of healthcare education in Hispanic communities
- Directors of National Guard Family Resource Centers
- Leaders/facilitators of education for Grandparents
- Directors/Coordinators of Faith Based Organizations
- Presidents/Leaders of University Service Organizations
- Courts, County Attorney offices
- Law enforcement
- DCBS offices and workers
- Foster parent groups/trainings
- Community Collaboration for Children
- Community Early Childhood Councils

**Activities:** *In Catalyst, choose Goal Perinatal/Infant Mortality & Activity Code #201 Safe Sleep for Community Partners.*

**Step 1)** Identify community agencies that have infant rooms, provide any type of infant care, and/or work with new parents, mothers and other caregivers of infants (e.g., grandparents, foster parents, etc.). LHD staff must take the required training called Making Community Partnerships Work: A Toolkit, created by the March of Dimes. Use the link <http://youtu.be/yFz7bgPby3Q>.

**Step 2)** Select two or more of these agencies to target for this package. Discuss with the leaders of these community agencies how to incorporate current safe sleep information and recommended, evidence-based best practices into existing educational programs and/or trainings for family/parenting groups and other caregivers. These agencies will be your Community Partners.

**Step 3)** Offer to provide educational presentations to the participating groups regarding safe sleep practices, using the Safe Sleep PowerPoint provided by DPH/MCH.

**Step 4)** Materials to promote safe sleep are listed in Approved Materials/Resources List and at [www.safesleepky.org](http://www.safesleepky.org).

- Ordering information can be provided to Community Partners so they can order their own materials for staff and parent education; or,
- LHDs can print or order the Safe Sleep materials to distribute to their Community Partners.

**Step 5)** Arrange to distribute educational packages/materials to selected Community Partners and schedule educational presentations as requested by the community agencies. Offer to provide a presentation on Safe Sleep for parent groups (if they have one). Use "Reducing the Risk of SIDS in Child Care" Speaker's Kit, available in English and Spanish at [www.healthychildcare.org/sids.html](http://www.healthychildcare.org/sids.html).

- **Note:** Community Partners must agree to provide specific instruction on Safe Sleep in order to obtain Safe Sleep materials from the LHD. They must agree that materials will only be distributed as part of a family/parenting or similar group presentation provided by the community agency.

**Step 6)** Follow up with Community Partners within 4 to 6 weeks to see if they have used the materials and to obtain an approximate number of clients they reached during that time. Collect success stories and note any barriers to safe sleep practices. Report the number of Community Partners participating and provide a count of the materials ordered and distributed by the LHD in Catalyst.

#### Training Requirements:

- *Making Community Partnerships Work: A Toolkit* by March of Dimes <http://youtu.be/yFz7bgPby3Q>.
- MCH Catalyst Reporting & Processes at <https://youtu.be/bFdkByNEZUs>

#### Reporting Requirements, Allowable Events & Activities:

- Must report in Catalyst using Goal Perinatal/Infant Mortality & Activity Code #201 Safe Sleep for Community Partners.
- KDPH requires monthly reporting in Catalyst by the 20<sup>th</sup> of the following month.
- Non-compliance with reporting deadlines, or incorrect reporting could result in a loss of funding.

*Reporting in Catalyst must be done monthly for activities by the 20th of the following month for which you are reporting (e.g., July's activity reporting must be completed by COB August 20). Report all package related events and activities; including activity type, hours, audience types and numbers reached, outcomes, successes, challenges and barriers, etc. in MCH Catalyst in Outputs/Events, on the RESULTS page. Your descriptions should be brief, but must include all pertinent information. NOTE: Audience numbers must be unduplicated.*

- *Presentations by LHD Staff:* The number of presentations provided should be entered into the **# Events** box. The types of presentations (e.g. training versus presentation); community partner type (e.g. hospital, birthing center, local business, church, etc.); and, name of community partner(s) should be entered in the space labeled **Output Journal**. Enter the number of participants and their categories in the section labeled **Audience** (e.g. 1 hospital, 12 others [hospital staff], 1 community agency, etc.). If you did 5 presentations during the reporting period, enter the activity of presentations once in Outputs/Events in Catalyst; enter the number 5 in the # Events; list for whom the presentations were completed in the Output Journal; and, provide audience category totals for the 5 events in the appropriate categories in Audience.
- *Staff Development:* The required training completed by the MCH Coordinator or an approved designee during the reporting period should be entered into the **# Events** box. Enter the training title completed by Coordinator or a designee and name/title of who was trained in the **Output Journal**. Enter the number of LHD staff who completed required training(s) in the **Audience** section next to LHD Staff.
- *Outcomes, Successes & Barriers:* Expected outcomes, planning progress, outcomes, successes and/or barriers, must be reported for all activities in the **Output Journal**. The only exception is for administrative activities such as data entry for Catalyst reports.
- *Monthly Expense Report:* ARE **NOT REQUIRED** TO BE REPORTED IN CATALYST.

***Be outcome focused when developing and reporting activities in Catalyst!***

**Approved Materials/Resource List (may be ordered or downloaded for use):** Follow your LHD procedures for ordering these materials/supplies.

- FREE information and materials from DPH/MCH found at [www.safesleepky.org](http://www.safesleepky.org). Recommend Safe Sleep brochure, one page handout "What does safe sleep look like?"
- FREE materials available from NICHD: <http://www.nichd.nih.gov/sts/materials/Pages/default.aspx> Materials are available in English and Spanish. [It is recommended that you order by phone: **1-800-505-2742**, as *Orders may take up to two weeks to arrive.*] Recommend **"Safe Sleep for Your Baby"** video.
- VIDEO "Safe Sleep for Your Baby Right from the Start" DVD \$20.00 (**Specific to** Hospitals, Doctor's Offices, **Health Depts. & Clinics**) <http://www.cribsforkids.org/educational-materials/>
- **Free training** resource from the AAP <http://www.healthychildcare.org/sids.html>. Recommend "A Parent's Guide to Safe Sleep", "A Child Care Provider's Guide to Safe Sleep", and "Reducing the Risk of SIDS in Child Care" Speaker's Kit.

**Allowable Expenses for Reimbursement:**

- Staff time for activities related to this package
- In-state travel for activities related to this package
- Preapproved and/or items on the Approved Materials/Resources List, including shipping and handling
- Training and related expenses as required by DPH/MCH. If a DPH/MCH training requires overnight travel, meals and/or lodging will be accommodated with PRIOR DPH/MCH approval and will be subject to current DPH Travel Regulations. **All overnight travel must be preapproved by DPH/MCH.**
- Printing, duplication and signage directly related to package activities are allowable only upon preapproval by DPH/MCH
- Prevention messaging directly aligned with activities specific to this package in the form of school/community banners, posters, etc. will be allowable. However, these cannot be used to advertise private and/or commercial entities, whether or not they are donors. All such expenses **MUST** be preapproved by DPH/MCH or the expense will not be paid or reimbursed
- DPH/MCH will review other requests to determine if they can be approved for this package on a case-by-case basis

**Expenses NOT Allowable for Reimbursement:**

- Items not found on the Approved Materials/Resources List or not preapproved by DPH/MCH
- Materials used for mass distribution (e.g. health fairs, baby showers, etc.)
- Any billable and/or clinical service
- Media (except what is preapproved by DPH/MCH as prevention messaging as described in the AR and in Allowable Expenses)
- Food and/or lodging not associated with preapproved, package related overnight travel

**FY19 MCH Goal: Children/Adolescents Health Package  
Activity Code #206: 100% Tobacco Free Schools (TFS)**

**Goal:** To make all schools in Kentucky 100% Tobacco Free.

**Objective:** The LHD will promote 100% Tobacco Free Schools by assisting the District Board of Education and other community stakeholders, including private schools with the development and implementation of a policy for 100% Tobacco Free Schools for all of the schools within their district.

**Target Contacts:**

- Public School Districts
- Private Schools

**Activities:** *In Catalyst, choose Goal Children/Adolescents & Activity Code #206 100% Tobacco Free Schools.*

**Step 1)** Designate a LHD contact person to organize activities in the schools and school districts throughout their service area. The LHD contact person should collaborate with the LHD Tobacco Coordinator, if the Tobacco Coordinator is not the designated contact for this package.

**Step 2)** Designated LHD staff will participate in the training webinar, which is hosted by the Kentucky Tobacco Prevention and Cessation Program (KTPC).

**Step 3)** Establish current, baseline data by utilizing state and local data, such as the Youth Risk Behavior Survey (YRBS), Kentucky Incentives for Prevention (KIP) survey, and the School Health Profile.

**Step 4)** Meet with key gatekeepers, stakeholders and identified potential partners within the school district (suggested: Family Resource and Youth Service Center Director, Director of Pupil Personnel, health teachers, school nurses, student groups, activities advisors, etc.).

**Step 5)** Survey school personnel, students and community to measure support for 100% TFS. Survey tools are available from the KTPC and can be administered by paper or by Survey Monkey.

**Step 6)** Meet with individual School Board members to assess support for 100% TFS.

**Step 7)** Collaborate with appropriate student groups (suggested: Teens Against Tobacco Use, Students Against Destructive Decisions, Beta Club, Student Council, Future Health Professionals) to advocate for policy change. Activities will be targeted based upon results derived from the surveys, but may include meeting with school administrators and creating promotional posters for the school buildings.

**Step 8)** LHD staff, school district partners, and students present survey results, information supporting 100% TFS policies, and a model policy (supplied by KTPC) to the District School Board. The students and their partners will request a vote be taken to adopt the model policy.

**Step 9)** If policy is adopted; assist school district in enactment, including implementation of the checklist and the use of banners, both provided by KTPC. If policy is not adopted, continue advocacy campaign and repeat steps 3-6 on an annual basis.

**Step 10)** Using state and local data resources such as the YRBS, KIP and School Health Profile.

**Step 11)** If school district already has a 100% TFS policy in place, utilize the implementation checklist with each school in the district (or a reasonable sample for large school districts) to track compliance. Work with school administration to increase adherence to policy using resources from KTPC.

### Reporting Requirements, Allowable Events & Activities:

- Must report in Catalyst using Goal Children/Adolescents & Activity Code #206 100% Tobacco Free Schools.
- KDPH requires monthly reporting in Catalyst by the 20<sup>th</sup> of the following month.
- Non-compliance with reporting deadlines, or incorrect reporting could result in a loss of funding.

*Reporting in Catalyst must be done monthly for activities by the 20th of the following month for which you are reporting (e.g., July's activity reporting must be completed by COB August 20). Report all package related events and activities; including activity type, hours, audience types and numbers reached, successes, challenges and barriers, etc. in MCH Catalyst in Outputs/Events, on the RESULTS page. Your descriptions should be brief, but must include all pertinent information. NOTE: Audience numbers must be unduplicated.*

- *Presentations by LHD Staff:* The number of presentations provided should be entered into the **# Events** box. The types of presentations (e.g. school board meeting presentation, school staff education, family/parenting group education, etc.); names of school districts, schools and/or other groups receiving the presentation should be entered in the space labeled **Output Journal**. Enter the number of participants and their categories (e.g. school staff, schools, etc.) in the section labeled **Audience** section (e.g. 1 school or district [classify the school district as a school in this case], 12 others [school staff], etc.). If you did 5 presentations during the reporting period, enter the activity of presentations once in Outputs/Events in Catalyst; enter the number 5 in the **# Events**; list for whom the presentations were completed in the Output Journal; and, provide audience category totals for the 5 events in the appropriate categories in Audience.
- *Staff Development:* The required training completed by the MCH Coordinator or an approved designee during the reporting period should be entered into the **# Events** box. Enter the training title completed by Coordinator or a designee and name/title of who was trained in the **Output Journal**. Enter the number of LHD staff who completed required training(s) in the **Audience** section next to LHD Staff.
- *Policy Reviews/Implementation:* The number of tobacco free policy reviews and/or implementations at the school district level should be entered into the **# Events** box. In the **Output Journal**, enter the name(s) of the district(s) and school(s), contact information, and outcomes of the policy reviews and/or implementation of a tobacco free policy for each listing (e.g. The Doodle District School Board decided to review their schools' tobacco policy after having a presentation by LHD staff. They requested LHD staff help them strategize about how to implement a 100% tobacco free school district policy by the end of the school year). The number of districts and their schools that have reviewed their tobacco use policies should be entered in the **Audience** section next to schools. The actual number of schools that implemented a 100% TFS policy because of your efforts must be reported as they occur in the **Output Journal**.
- *Outcomes, Successes & Barriers:* Expected outcomes, planning progress, outcomes, successes and/or barriers, must be reported for all activities in the **Output Journal**. The only exception is for administrative activities such as data entry for Catalyst reports.
- *Monthly Expense Report:* ARE **NOT REQUIRED** TO BE REPORTED IN CATALYST.

***Be outcome focused when developing and reporting activities in Catalyst!***

### Approved Materials/Resources List:

- Model policy, background materials and implementation resources available at <http://tobaccofreeschoolsky.org/index.html>
- Youth Risk Behavior Survey (monitors six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and adults, statewide conducted on odd years, with method studies on even years) [http://education.ky.gov/curriculum/CSH/Pages/Youth-Risk-Behavior-Surveillance-System-\(YRBS\).aspx](http://education.ky.gov/curriculum/CSH/Pages/Youth-Risk-Behavior-Surveillance-System-(YRBS).aspx)
- Kentucky Incentives for Prevention (KIP) Survey (monitors high-risk behaviors among high school students on the odd years, available statewide or district-level) <http://reachevaluation.com/projects/kentucky-incentives-for-prevention-kip-survey/>
- School Health Profiles (evaluates the effectiveness of school health policies and programs, statewide conducted on the even years) <http://education.ky.gov/curriculum/CSH/Pages/School-Health-Profiles.aspx>
- Signage and other implementation materials (***MUST have preapproval***). School districts are encouraged to use the 100% TFS logo available from KTPC.

### Allowable Expenses for Reimbursement:

- Staff time for activities related to this package
- In-state travel for activities related to this package
- Preapproved and/or items on the Approved Materials/Resources List, including shipping and handling
- Training and related expenses as required by DPH/MCH. If a DPH/MCH training requires overnight travel, meals and/or lodging will be accommodated with PRIOR DPH/MCH approval and will be subject to current DPH Travel Regulations. **All overnight travel must be preapproved by DPH/MCH.**
- Printing, duplication and signage directly related to package activities are allowable only upon preapproval by DPH/MCH
- Prevention messaging directly aligned with activities specific to this package in the form of school/community banners, posters, etc. will be allowable. However, these cannot be used to advertise private and/or commercial entities, whether or not they are donors. All such expenses ***MUST*** be preapproved by DPH/MCH or the expense will not be paid or reimbursed
- DPH/MCH will review other requests to determine if they can be approved for this package on a case-by-case basis

### Expenses NOT Allowable for Reimbursement:

- Items not found on the Approved Materials/Resources List or not preapproved by DPH/MCH
- Materials used for mass distribution (e.g. health fairs, baby showers, etc)
- Any billable and/or clinical service
- Media (except what is preapproved by DPH/MCH as prevention messaging as described in the AR and in Allowable Expenses)
- Food and/or lodging not associated with preapproved, package related overnight travel
- Funds cannot be used for Nicotine Replacement Therapy.

## **FY18 MCH SUMMARY OF PACKAGES**

### **SAFE SLEEP FOR CHILD CARE PROVIDERS**

- Goal: Reduce infant mortality due to unsafe sleep practices by childcare providers.
- Target: Child care provider administrators, staff and families with infants in the facilities.
- Number of health departments who provided these services: 18
- Number of child care providers reached: 8,000+
- Innovative Strategies: Local health departments offer:
  - Training on the most current safe sleep environments and practices for childcare providers.
  - Training is available for clock-hour training required annually per KY statute for childcare providers.
  - Assessments of the sleep environment in childcares
  - Policy review and development.

### **SAFE SLEEP FOR COMMUNITY PARTNERS**

- Goal: Reduce infant mortality from unsafe sleep practices with the assistance of community partners/stakeholders.
- Target: Community agencies and businesses that have contact with people who have infants and/or very young children (e.g. hospitals, health care providers, community educators, first responders, foster parent groups, parenting groups, service organizations, etc.).
- Number of health departments who provided these services: 26
- Number of community partners): 18,000+
- Innovative Strategies: Local health departments and community partners:
  - Train first responders, law enforcement, about safe sleep environments and practices
  - Provide community partners with safe sleep material packets
  - Assist with crib distribution and safe sleep materials to families by community partners and LHDS
  - Trainings provided for Safe Sitter classes

### **PREVENTION OF ABUSIVE HEAD TRAUMA (PAHT)**

- Goal: Reduce child abuse and infant mortality from abusive head trauma by increasing the number of community partners and health care providers who offer education and information to new parents and other caregivers about methods to calm crying infants and young children.

- Target: Families with infants and/or young children to age 5 years; community agencies that provide parenting education; health care providers; foster care organizations
- Number of health departments who provided these services: 27
- Number of individuals, families and organizations reached: 48,400+
- Innovative Strategies: Health departments are:
  - Developing curriculum to address AHT with high school students
  - Nurturing Father classes offered through the local court system
  - Education and materials provided to TAPP programs (schools for pregnant or parenting teens) throughout Kentucky.

### **CRIBS FOR KIDS FOR COMMUNITY PARTNERS**

- Goal: Reduce infant mortality from unsafe sleep practices, such as bed sharing by working with community partners to provide cribs for qualifying families in need.
- Target: Pregnant and postpartum women; families with infants/young children to age two; caregivers of same; low income and other underserved populations
- Number of health departments who provided these services: 22
- Number of pregnant and postpartum women, families and caregivers reached: 7,600+
- Number of crib kits distributed: 700+
  - Kits include:
    - Pack-N-Play crib
    - safe sleep and prevention of abusive head trauma educational materials
    - halo sleep sack, sheet
- Innovative Strategies: LHDs
  - Partner with community agencies, stakeholders, or providers to match crib costs
    - 2 MCO's provided a \$10,000 match in the past year
    - High School student community projects have focused on fundraising activities and education for cribs and families
    - Community organizations share cost, education, and connect to families strengthening the bond to resources

### **PRENATAL CARE TRACKING**

- Goal: Health departments follow-up with women who have a positive pregnancy test to verify if they attend their first prenatal visit within two weeks of the test result and continue with regular prenatal care throughout their pregnancy.
- Target: Pregnant women and prenatal care providers
- Number of health departments who provided these services: 23
- Number of pregnant women and prenatal care providers reached: 7,600+
- Innovative Strategies: LHDs developed relationships with local providers and:

- Shared resources
- Improved referral communication
- One LHD worked to secure transportation vouchers from community partnerships and local grants

### **HEALTHY BABIES ARE WORTH THE WAIT (HBWW)**

- Goal: Reduce the number of preventable preterm births through education and policy change by promoting public awareness and working with the local March of Dimes, hospitals and prenatal care providers in the LHD service area.
- Target: Pregnant women and their families, birthing hospitals, prenatal providers, community agencies, community leaders, community groups, facilitators, gatekeepers
- Number of health departments who provided these services: 5
- Number of pregnant women, families, hospitals, etc. reached: 8,600+
- Innovative Strategies: LHDs engage:
  - Local birthing facilities to provide education re: HBWW at grand rounds
  - Educate high risk populations, such as incarcerated pregnant women and the clinicians who provide prenatal services to the prisons

### **100% TOBACCO FREE SCHOOLS**

- Goal: To make all schools in Kentucky 100% tobacco free.
- Target: Public and private schools and school districts
- Number of health departments who provided these services: 10
- Number of schools and school districts reached: 156
- Innovative Strategies: LHDs engage with individual schools and districts to promote
  - Tobacco free policies
  - Ten school districts have adopted the 100% Tobacco Free Schools policy in 2018

### **BULLYING & SUICIDE PREVENTION FOR SCHOOLS & COMMUNITIES**

- Goal: To decrease the number of bullying and suicide events occurring in elementary, middle and high schools throughout the Commonwealth of Kentucky. This will support safer learning environments for students, teachers and staff while on school property.
- Target: Elementary, Middle and High Schools
- Number of health departments who provided these services: 19
- Number of schools reached: 214
- Innovative Strategies: LHDs collaborated with coordinated school health programs to
  - Provide education regarding suicide screening and prevention
  - Collaborated with Adolescent Health programs at local university clinics to provide school based screenings and education on coping skills

## **COORDINATED SCHOOL HEALTH (CSH)**

- Goal: Align the work of the Local Health Department (LHD) to support the Whole School, Whole Community, Whole Child Model (WSCC). Coordinate and enhance the work with schools around increasing physical activity and access to healthy eating in the school setting.
- Target: Public Schools and School Districts, Community Agencies
- Number of schools reached: All districts have a CSH program
- Innovative Strategies: Schools and CSH programs collaborate:
  - Local farmers to provide Farm to School experiences for school children
  - Improve accessibility of fresh produce that is affordable for families
  - Breckinridge LHD developed a video regarding outcomes of distracted driving while texting.

## **FLUORIDE VARNISH FOR CHILDREN THROUGH FIFTH GRADE**

- Goal: Increase the application of fluoride varnish services for children through the fifth grade in order to improve the oral health outcomes for children throughout the Commonwealth of Kentucky.
- Target: Any child from their first tooth eruption through the fifth grade served by any LHD program, including school based outreach.
- Number of health departments who provided these services: 22
- Number of children provided with fluoride varnishes: 16,262
- Innovative Strategies: Local health department staff collaborated with school staff and faculty to increase the number of children who receive fluoride varnish services by providing it in the schools during the course of a normal school day.

## **GIVING INFANTS & FAMILIES TOBACCO A FREE START (GIFTS)**

- Goal: Decrease the number of women who smoke during and after pregnancy and reduce secondhand smoke exposure to pregnant women and infants.
- Target: Pregnant and Postpartum Women
- Number of health departments who provided these services: 8
- Number of Pregnant and Postpartum Women referred for the GIFTS Program: 488
- Innovative Strategies: Louisville provides smoking cessation education and support groups routinely (by request) at a local community agency that provides shelter for pregnant women.

## **HEALTHY PEOPLE, ACTIVE COMMUNITIES**

- Goal: Make healthy eating and physical activity safe, easily accessible and supported by policies that make environmental changes, which support and encourage sustainable activities within communities.

- Target: Local People, Families & Parenting Groups, Churches, Community Agencies, Child Care Providers, Early Care & Education Programs, Schools, Local Businesses (including Farmers' Markets), Local Government Agencies
- Number of health departments who provided these services: 24
- Number of people reached: 64,000
- Innovative Strategies: Health departments collaborate with local officials to develop community resources to improve nutrition and exercise.
  - Information is on social media and LHD web pages
  - Collaboration with local farmers for Farmer's Markets
  - Creation or improvement of walking trails
  - Open days with no charge for admission to local gyms

\* All numbers as from July 1, 2017 through June 30, 2018. Numbers may be approximate because final reports are not due until after the deadline for this report.