CURRICULUM VITAE

LYNETTE K. ROGERS, Ph.D.

PRESENT TITLE & AFFILIATION

Principal Investigator
Center for Perinatal Research
The Research Institute at Nationwide Children's Hospital

Associate Professor with Tenure
Department of Pediatrics
The Ohio State University College of Medicine

CITIZENSHIP AND VISA STATUS

U.S. Citizen

OFFICE ADDRESS

The Research Institute at Nationwide Children's Hospital
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Columbus, Ohio 43215
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EDUCATION

UNDERGRADUATE EDUCATION

5/1977 B.S., Microbiology
University of Southwestern Louisiana
Lafayette, Louisiana

GRADUATE EDUCATION

08/2004 Ph.D., Molecular, Cellular, and Developmental Biology
The Ohio State University
Columbus, Ohio

POST-GRADUATE EDUCATION & TRAINING

2004-2005 Research Scientist
Columbus Children's Research Institute
Columbus, Ohio

ACADEMIC APPOINTMENTS

2005-2012 Assistant Professor, Department of Pediatrics
The Ohio State University
Columbus, Ohio

2005-Present Principal Investigator
The Research Institute at Nationwide Children's Hospital
Columbus, Ohio

2006-Present Faculty, Biomedical Sciences Graduate Program
The Ohio State University
Columbus, Ohio

2012-Present Director, Analytical Chemistry and Small Molecule Core Facility
The Research Institute at Nationwide Children's Hospital
Columbus, Ohio

2012-Present Associate Professor (with tenure), Department of Pediatrics
The Ohio State University
Columbus, Ohio

SERVICE

INSTITUTIONAL/LOCAL ACTIVITIES

2013-Present Member
Institutional Animal Care and Use Committee
The purpose of this committee is to regulate and supervise the use of animals in research.
The Research Institute at Nationwide Children's Hospital

2014-Present Advisor
Research Institute Trainee Association
The purpose of this committee is to offer opportunities for training, advice, and guidance to graduate students and postdoctoral fellows.
The Research Institute at Nationwide Children's Hospital

2007-Present Representative
Graduate School Faculty
The purpose of this position is to serve as a mentor for graduate students and to serve as a graduate school representative for students defending their thesis in other programs.
The Ohio State University

2010-2012 Member
Research Information Technology Advisory Council
The purpose of this committee is to offer suggestions and advise for purchasing and employing new technologies for the Institute
The Research Institute at Nationwide Children's Hospital

2012-Present Member
NCH Radiation Safety Committee
The purpose of this committee is to regulate and supervise the use of radioactivity in research and clinical use.
The Research Institute at Nationwide Children's Hospital

2012-Present Director
Analytical Chemistry and Small Molecule Core Facility
This core facility offers laboratory analyses for research studies using mass spectrometry and other cutting edge analytical techniques.
The Research Institute at Nationwide Children's Hospital

REGIONAL ACTIVITIES

2007-2010 Treasurer
Ohio Valley Regional Chapter
Society of Toxicology

2010-2011 Vice President,
Ohio Valley Regional Chapter
Society of Toxicology

2011-2012 President-Elect
Ohio Valley Regional Chapter
Society of Toxicology

2012-2013 President
Ohio Valley Regional Chapter
Society of Toxicology

2014-Present Executive Board
Sigma Xi
Ohio State Regional Chapter
2016-Present Secretary/Treasurer
Sigma Xi
Ohio State Regional Chapter

NATIONAL/INTERNATIONAL ACTIVITIES

2007-2010 Council Member (Invited)
Women in Science Committee
The Society for Free Radical Biology and Medicine (National)

2009-2010 Member (Invited)
Program Committee
Society for Free Radical Biology and Medicine (National)

2014-2015 Member (Elected)
Regional Chapters Collaborations and Communications Committee
Society of Toxicology (International)

2013-Present Member (Invited)
Program Committee
Assembly for Respiratory Structure and Function
American Thoracic Society (International)

2015-Present Member (Elected)
National Nominating Committee
Society of Toxicology (International)

2015-Present Counselor (Elected)
Cardiovascular Toxicology Specialty Section
Society of Toxicology (International)

2016-Present Member (Elected)
Publications Committee
American Physiological Society (International)

RESEARCH SUPPORT

ONGOING RESEARCH

2016/01/19-2019/01/18
1R01HD083292, NIH/NICHD
Carlson, SE and Valentine, CJ (MPI)
DHA Supplementation to Reduce Preterm Birth (ADORE)
This grant will fund a multi-center clinical trial for analyzing the efficacy of maternal DHA supplementation and the effects on preterm birth.
Role: Co-I (Site PI)

2011/09/30-2017/06/30 (NCE)
R01 AT006880, NIH/NCCAM, ODS
Rogers, Lynette Kay (PI)
DHA Attenuates Inflammatory Responses Through Altering RAGE Signaling
The goal of these investigations is to decipher the cellular mechanisms associated with DHA-mediated decreases in inflammation.
Role: PI

2014/06/01-2017/05/31
12-FY14-171, March of Dimes
Keim, Sarah (PI)
Omega Tots: polyunsaturated fatty acid supplementation of toddler diets to improve development and behavior outcomes among children born preterm.
The goal of this study is investigate the efficacy of polyunsaturated fatty acids in improving neurocognitive outcomes in preterm infants.
Role: Co-I

2013/07/01-2017/06/31
R01HL119280, NIH/NHLBI
Tipple, Trent E (PI)
Targeting Thioredoxin Reductase-1 to Prevent Bronchopulmonary Dysplasia
The goal to this grant is to investigate the role of Thioredoxin Reductase-1 in the context of newborn hyperoxic lung injury, focusing on Nrf-2 pathways.
Role: Co-I

TRAINEE RESEARCH

6/1/2015-5/31/2020
T32HL098039, NIH/NHLBI
AJ Trask (PI)
Training in Congenital and Acquired Heart Disease
Role: Mentor

2/01/2015-1/31/2017
15UFEL22760002, AHA
J Lincoln (PI)
Nationwide Children's Hospital Summer Undergraduate Research Program
Role: Mentor

4/1/2016-3/31/2021
1R25HD086885, NIH/NICHD
I Buhimschi (PI)
Futures Matter: Transformative Transdisciplinary Summer Research Program.
This proposal seeks to provide a transformative 10-week summer research experience that will encourage high school students to pursue careers that will help advance progress child health related research.
Role: Mentor

COMPLETED RESEARCH

01/01/2009-12/31/2010
American Thoracic Society
LK Rogers (PI)
Lipoxin Receptor (ALXR) and Inflammatory Resolution in the Development of Bronchopulmonary Dysplasia
The goal of this study is to explore the role of the novel receptor ALXR in the progression of chronic lung disease in preterm infants.
Role: PI

9/1/2009 – 12/30/2012
1F31HL097619
RD Britt (PI)
Lipoxin-Mediated Inflammatory Resolution in Newborn Hyperoxic Lung Injury
This is a training grant for a graduate student.
Role: Mentor

1/1/2010 – 12/30/2011
The Research Institute at Nationwide Children's Hospital (Intramural Grant)
LK Rogers (PI)
Novel Biomarkers for the Identification of Infants at Risk for the Development of Bronchopulmonary Dysplasia
The goal of this grant was to identify new biomarkers in the plasma of preterm infants.
Role: PI

8/5/2013-7/31/2015
1R43HL120352
J Prakash (PI)
A Novel Thioredoxin Mimetic Prodrug for Prevention of Bronchopulmonary Dysplasia
The goal to this grant is to investigate the efficacy of a new Thioredoxin mimetic in treating newborn hyperoxic lung injury in a mouse model.
Role: Co-I, Sub-contract

PENDING RESEARCH

9/1/2016-8/31/2020
R01HD0880833, NIH/NICHD, scored 5th percentile, below the pay line for NICHD
Rogers, Lynette Kay (PI)
Optimizing Therapeutic Delivery of MicroRNAs to Prevent Chronic Lung Disease in Preterm Infants
This grant explores the role of miR-29b in lung growth, development, and the pathology associated with preterm birth.
Role: PI

7/1/2016-6/30/2021
R01HL134034
LE Wold, LK Rogers (MPI)
Altered cardiac structure and function in response to early-life inflammation
This grant explores the influence of perinatal exposures on the development of adult heart disease.
Role: MPI

11/1/2016-10/31/2020
R01HL1322343
LK Rogers (PI)
MicroRNA-29b in Neonatal Lung Disease
This grant explores the role of miR-29b in lung growth, development, and the pathology associated with preterm birth.
Role: PI

9/1/2016 – 8/31/2019
PCORI (OSU)
Fristad M and Gracious B (MPI)

What to Do While Waiting for the Doctor: Brief Assessment, Feedback and Support with or without Nutritional Supplementation as Initial Intervention for Waitlisted Youth in a Behavioral Health Clinic
Role: Co-I

PUBLICATIONS

ARTICLES IN PEER REVIEWED JOURNALS

1. McDaniel LS, **Rogers LK**, and Hill WE. (1978). Survival of recombination-deficient mutants of Escherichia coli during incubation with nalidixic acid. J Bacter 134: 1195-1198.
2. Brown SA, **Rogers LK**, Dunn JK, Gotto AM Jr., and Patsch W. (1990). Development of cholesterol homeostatic memory in the rat is influenced by maternal diets. Metabolism 39: 468-473
3. Benzick, AE, Reddy SL, Gupta S, **Rogers LK**, and Smith CV. (1994). Diquat and acetaminophen-induced alterations of biliary efflux of iron in rats. Biochem Pharmacol 47: 2079-2085.
4. Gomez MR, Benzick AE, **Rogers LK**, Heird WC, and Smith CV. (1994). Attenuation of acetaminophen hepatotoxicity in mice as evidence for the bioavailability of the cysteine in D-glucose-L-cysteine in vivo. Toxicol Letters 70: 101-108.
5. Gupta S, **Rogers LK**, and Smith CV. (1994). Biliary excretion of lysosomal enzymes, iron and oxidized protein in Fischer-344 and Sprague-Dawley rats and the effects of diquat and acetaminophen. Toxicol Appl Pharmacol 125: 42-50.
6. Gupta S, Kleiner HE, **Rogers LK**, Lau SS, and Smith CV. (1997). Redox stress and hepatic DNA fragmentation induced by diquat in vivo are not accompanied by increased 8-hydroxydeoxyguanosine contents, Redox Report 3: 31-39.
7. Gupta S, **Rogers LK**, and Smith CV. (1997). Inhibition of carbamyl phosphate synthetase-I and glutamine synthetase by hepatotoxic doses of acetaminophen in mice. Toxcol Appl Pharm 146: 317-327.
8. Yang CY, Gu ZW, Yang HX, Yang M, Wiseman WS, **Rogers LK**, Welty SE, Katta V, Rohde MF, and Smith CV. (1997). Oxidation of bovine b-casein by hypochlorite. Free Rad Biol Med 22: 1235-1240.
9. **Rogers LK**, Moorthy B, and Smith CV. (1997). Acetaminophen binds to mouse hepatic and renal DNA at human therapeutic doses. Chem Res Toxicol 10: 470-476.
10. Yang C-y, Gu Z-W, Yang M, Lin S-N, Garcia-Prats AJ, **Rogers LK**, Welty SE, and Smith CV. (1999). Selective modification of cysteine 61 in the oxidation of low density lipoproteins by myeloperoxidase in vitro, J Lipid Res 40: 686-698.
11. **Rogers LK**, Valentine CJ, Szczpyka M, and Smith CV. (2000). Effects of hepatotoxic doses of acetaminophen and furosemide on tissue concentrations of CoASH and CoASSG in vivo. Chem Res Toxicol 13: 873-882.
12. Wong YL, Smith CV, McMicken HW, **Rogers LK**, and Welty SE. (2001). Mitochondrial thiol status in the liver is altered by exposure to hyperoxia. Toxicol. Lett 123: 179-193.
13. O'Donovan DJ, Kelley DK, **Rogers LK**, Welty SE, Ramsay PL, and Smith CV. (2002). Mitochondrial oxidant stress in hyperoxia: CoASH and CoASSG. Pediatr Res 51: 346-353.
14. Fernandes CJ, Tamura T, Stewart KD, Nguyen UT-L, **Rogers LK**, Elliston JF, and Smith CV.(2002). Stable transfection with □-glutamylcysteine synthetase heavy chain cDNA protects Chinese hamster ovary cells from oxidant toxicity. Toxicol Lett 136: 107-120.
15. Jenniskens FA, Jopperi-Davis KS, Walters LC, Schorr EN, **Rogers LK**, Welty SE, and Smith CV. (2002). Effects of fasting on tissue contents of coenzyme A and related intermediates in Rats. Pediatr Res 52: 437-442.
16. **Rogers LK**, Gupta S, Welty SE, Hansen TN, and Smith CV. (2002). Nuclear and nucleolar glutathione reductase, peroxidase, and transferase activities in livers of male and female Fischer-344 rats. Toxicol Sci 69: 279-285.
17. Jopperi-Davis K, Park MS, **Rogers LK**, Backes CH Jr., Lim, IK, and Smith CV. (2004). Compartmental inhibition of hepatic glutathione reductase activities by 1,3-bis(2-chloroethyl)-N-nitrosourea (BCNU) in Sprague-Dawley and Fischer-344 Rats. Toxicol Lett, 147: 219-228.
18. **Rogers LK**, Tamura T, Rogers BJ, Welty SE, Hansen TN, and Smith CV. (2004). Analyses of glutathione reductase hypomorphic mice indicate a genetic knock-out. Toxicol Sci, 82: 367-373.
19. Malleske DT, **Rogers LK**, Velluci SM, Young TL, Park MS, Long DW, Welty SE, Smith CV, and Nelin LD. (2006). Hyperoxia increases L-arginine flux through hepatic arginase in mice. Toxicol Appl Pharmacol, 215: 109-117.
20. **Rogers LK**, Leinweber BL, Smith CV. (2006). Detection of reversible protein thiol modification in tissues. Analytical Biochem. 358: 171-184.
21. **Rogers LK**, Bates CM, Welty SE, Smith CV. (2006). Diquat administration induces renal proximal tubule injury in glutathione reductase-deficient mice. Toxicol Appl Pharmacol, 217: 289-298.

22. Tipple TE, Welty SE, **Rogers LK**, Hansen TN, Choi YE, Kehrer JP, Smith CV. (2007). Thioredoxin-dependent mechanisms in defense against hyperoxic lung injury in glutathione reductase-deficient mice. Am J Resp Mol Cell Biol, 37(4): 405-413.
23. Park MS, Rieger-Fackeldey E, Schanbacher BL, Cook AC, Bauer JA, **Rogers LK**, Hansen TN, Welty SE, and Smith CV. (2007). Altered Expressions of Fibroblast Growth Factor Receptors and Alveolarization in Neonatal Mice Exposed to 85% Oxygen. Pediatr Res. Dec; 62(6):652-657.
24. Heyob KM, **Rogers LK**, and Welty SE. (2008). Glutathione Reductase Targeted to Type II Cells Does Not Protect Mice from Hyperoxic Lung Injury. Am J Resp Mol Cell Biol, Dec; 39(6):683-688.
25. **Rogers LK**, Tipple TE, Nelin LD, and Welty SE. (2009). Differential Response in the Lungs of Newborn Mouse Pups Exposed to 85% or >95% Oxygen. Pediatr Res, Jan; 65(1):33-8.
26. Valentine CJ, Fernandez S, **Rogers LK**, Hayes J, Lore P, Puthoff T, Dumm M, Jones A, Collins K, Curtiss J Hutson K, Clark K, and Welty S E. (2009). Early Amino Acid Administration Improves Preterm Infant Weight. J Perinatol, Jun; 29(6):428-32.
27. Tipple TE, Welty SE, Nelin LD, Hansen JM, **Rogers LK**. (2009). Alterations of the Thioredoxin System by Hyperoxia: Implications for Alveolar Development. Am J Respir Cell Mol Biol, 41: 612.
28. **Rogers LK**, Tipple TE, Britt RD, and Welty SE. (2009). Hyperoxia Exposure Alters Hepatic Lipid Metabolism in Newborn Mice. Pediat Res, 67:144.
29. Velten, M, Heyob KM, **Rogers LK**, Welty SE. (2010). Deficits in Lung Aveolarization and Function After Systemic Maternal Inflammation and Neonatal Hyperoxia Exposure. J Appl Physiol, May; 108(5):1347-56.
30. Stenger MR, Rose MJ, Joshi MS, **Rogers LK**, Chicoine LG, Bauer JA, Nelin LD. (2010). Inhaled Nitric Oxide Prevents 3-Nitrotyrosine Formation in the Lungs of Neonatal Mice Exposed to >95% Oxygen. Lung, Jun; 188(3):217-27.
31. Jiang B, Khandelwal AR, **Rogers LK**, Shi W, Orr AW, and Dugas TR. (2010). Antiretrovirals Induce Endothelial Dysfunction via an Oxidant-Dependent Pathway and Promote Neointimal Hyperplasia in C57BL/6 mice. Toxicol Sci, Oct; 117(2):524-36.
32. Farrell MR, **Rogers LK**, Liu Y, Welty SE, and Tipple TE. (2010). Thioredoxin-interacting protein inhibits hypoxia-inducible factor transcriptional activity. Free Radic Biol Med, Nov; 49(9):1361-7.
33. Valentine CJ, Morrow G, Fernandez S, Gulati P, Bartholomew D, Long D, Welty SE, Morrow AL, **Rogers LK**. (2010). Docosahexaenoic Acid and Amino Acid Contents in Pasteurized Donor Milk are Low for Preterm Infants. J Pediatr, Dec; 157(6):906-10.
34. Heyob KM, **Rogers LK**, Tipple TE, and Welty, SE. (2011). Riboflavin supplementation does not attenuate hyperoxic lung injury in transgenic spc−mthGR mice. Exp Lung Res, Apr; 37(3):155-61.
35. **Rogers LK**, Valentine CJ, Pennell M, Velten M, Britt RD, Dingess K, Zhao X, Welty SE, and Tipple TE. (2011). Maternal DHA Supplementation Decreases Lung Inflammation in Hyperoxia-Exposed Newborn Mice. J Nutrition, Feb; 141(2):214-22.
36. Cua CL, **Rogers LK**, Chicoine LG, Augustine M, Jin Y, Nash PL and Nelin LD. (2011). Down syndrome patients with pulmonary hypertension have elevated plasma levels of asymmetric dimethylarginine. Eur J Pediatr, Jul; 170(7):859-63.
37. **Rogers LK** and Velten M. (2011). Maternal Inflammation, Growth Retardation, and Preterm Birth: Insights into Adult Cardiovascular Diseases. Life Sciences, Sep, 89(13-14):417-21.
38. Kleinedler, JJ, Orchard, E, Foley, JD, **Rogers, LK**, Hebert, VY, Dugas, TR. (2011).
39. A dietary approach to increase in-stent stenosis in a rat model of stenting angioplasty. Atherosclerosis, Dec; 219(2):484-91.
40. Velten M, Hutchinson KR, Wold LE, Lucchesi PA, **Rogers LK**. (2011). Systemic Maternal Inflammation and Neonatal Hyperoxic Induce Remodeling and Impair Left Ventricular Function. PLoS One, Sep; 6(9):e24544.
41. Britt RD, Locy ML, Tipple TE, Nelin LD, **Rogers LK**. (2012). Lipopolysaccharide-induced Cyclooxygenase-2 Expression in Mouse Transformed Clara Cells. Cell Physiol and Biochem, Mar; 29(1-2):213-22.
42. Yan J, Meng X, Wancket LM, Lintner K, Nelin LD, Chen B, Francis K, Smith CV, **Rogers LK**, Liu Y. (2012). Glutathione Reductase Facilitates Host Defense by Sustaining Respiratory Burst and Promoting the Development of Neutrophil Extracellular Trap. Journal Immunology, Mar; 188(5):2316-2327.
43. Khandelwal AR, Hebert VY, Kleinedler JJ, **Rogers LK**, Ullevig, SL, Asmis, R, Dugas, TR. (2012). Resveratrol and quercetin interact to inhibit neointimal hyperplasia, J. Nutr., Aug; 142(8):1487-94.
44. Wancket LM, Meng X, **Rogers LK**, Liu Y. (2012). Mitogen-Activated Protein Kinase Phosphatase (MKP)-1 Protects Mice against Acetaminophen-induced Hepatic Injury. Toxicologic Pathology, Dec; 40(8):1095-105.
45. **Rogers LK**, Young CM, Pennell ML, Tipple TE, Leonhart KL, Welty SE. (2012). Plasma Lipid Metabolites are Associated with Gestational Age but Not Bronchopulmonary Dysplasia. Acta Paediatrica, Aug; 101(8):321-6.
46. Valentine CJ, Morrow G, Pennell M, Morrow AL, Hodge A, Haben-Bartz A, Collins K, **Rogers LK**. (2013). Randomized Controlled Trial of Docosahexaenoic Acid Supplementation in Midwestern U.S. Human Milk Donors. Breast Feeding Medicine, Feb; 8(1): 86-91.

47. Locy ML, **Rogers LK**, Prigge JR, Schmidt EE, Arner ES, Tipple TE. (2012). Thioredoxin Reductase Inhibition Elicits Nrf2-mediated Responses in Clara Cells: Implications for Oxidant-induced Lung Injury. Antioxid Redox Signal, Nov; 15;17(10):1407-16.
48. Velten M, Britt RD, Heyob KM, Welty SE, Tipple TE, **Rogers LK**. (2012). Perinatal Inflammation Exacerbates Hyperoxia Induced Functional and Structural Changes in Adult Mice. Am.J.Physiol Regul Integr Comp Physiol, Aug; 303(3):R279-90.
49. **Rogers LK**, Valentine CJ, Keim SA. (2012). DHA Supplementation: Current Implications in Pregnancy and Childhood. Pharmacol Res, Dec 21;70(1):13-19.
50. Britt RD, Velten M, Tipple TE, Nelin LD, **Rogers LK**. (2013). Cyclooxygenase-2 in Newborn Hyperoxic Lung Injury. Free Radical Biology and Medicine, April 25; 61C:502-511.
51. Yan J, Ralston MM, Meng X, Bongiovanni KD, Jones AL, Benndorf R, Nelin LD, **Rogers LK**, Smith CV, Liu Y. (2013). Glutathione Reductase Is Essential for Host Defense against Bacterial Infection. Free Radical Biology and Medicine, April 25; 61C:320-332.
52. Raffay TM, Locy ML, Hill CL, Jindal NS, **Rogers LK**, Welty SE, Tipple TE. (2013). Neonatal Hyperoxic Exposure Persistently Alters Lung Secretoglobin and Annexin Expression. Biomed Res Int. 2013: 408485.
53. Sharkey LC, Radin MJ, Heller L, *Rogers LK*, Tobias A, Matise I, Wang Q, Apple F, McCune SA. (2013). Differential Cardiotoxicity in Response to Chronic Doxorubicin Treatment in Male Spontaneous Hypertension-Heart Failure (SHHF), Spontaneously Hypertensive (SHR), and Wistar Kyoto (WKY) rats. Toxicology and Applied Pharmacology. Nov 15; 273(1): 47-57.
54. **Rogers LK**, Graf AE, Bhatia A, Leonhart KL, and Oza-Frank R. (2013). Associations Between Maternal and Infant Morbidities and sRAGE Within the First Week of Infant Life. PLoS One, December 6; 8(12):e825337.
55. Graf AE and Haines KM, Pierson CR, Bolon B, Houston RH, Velten M, Heyob KM, **Rogers LK**. (2014). Perinatal Inflammation Results in Decreased Oligodendrocyte Numbers in Adulthood. Life Sciences, Jan 17; 94(2): 164-71.
56. Britt RD, Velten M, Locy ML, **Rogers LK**, Tipple TE. (2014). The Thioredoxin Reductase-1 Inhibitor Aurothioglucose Attenuates Lung Injury and Improves Survival in a Murine Model of Acute Respiratory Distress Syndrome. Antioxidants and Redox Signaling, June; 20(17): 2681-2691.
57. Velten M. Britt RD, Heyob KM, Tipple TE, **Rogers LK**. (2014). Maternal Dietary Docosahexaenoic Acid (DHA) Supplementation Prevents Fetal Growth Restriction and Pulmonary Injury in a Newborn Murine Model of Perinatal Inflammation. J of Nutrition, Mar, 144(3): 258-66.
58. Bonny AE, Lange HLH, **Rogers LK**, Gothard DM, Reed MD. (2014). A Pilot Study of Depot Medroxyprogesterone Acetate Pharmacokinetics and Weight Gain in Adolescent Females. Contraception, May; 89(5):357-60.
59. Augustine MA, Bonny AE, **Rogers LK**. (2014) Medroxyprogesterone Acetate and Progesterone Measurement in Human Serum: Assessments of Contraceptive Efficacy. J of Analytical & Bioanalytical Techniques, (Special Issue: LC-MS Drug Discovery & Development) S5:005.
60. Velten M, Gorr MW, Youtz DJ, Velten C, **Rogers LK**, Wold LE. (2014). Adverse Perinatal Environment Contributes to Altered Cardiac Development and Function. AJP-Heart and Circulatory Physiology, May; 306(9): H1334-40.
61. Trittmann J, Peterson E, **Rogers LK**, Chen B, Backes CH, Klebanoff MA, Nelin LD. (2015) Plasma asymmetric dimethylarginine levels are increased in neonates with bronchopulmonary dysplasia-associated pulmonary hypertension. J Pediatr, Feb; 166(2):230-3.
62. Ali M, **Rogers LK**, Pitari GM. (2015) Serine phosphorylation of vasodilator-stimulated phosphoprotein (VASP) regulates colon cancer cell survival and apoptosis. Life Sci, Feb15, 123: 1-8, 2015.
63. **Rogers LK**, Robbins M, Dakhlallah D, Yang Z, Lee LJ, Mikhail M, Nuovo G, Pryhuber GS, McGwin G, Marsh CB, Tipple TE. (2015) microRNA-17~92 Cluster Expression is Attenuated in Bronchopulmonary Dysplasia. Annals of the American Thoracic Society, Oct; (10): 1506-13.
64. Ali M, Heyob KM, Velten M, Tipple TE, **Rogers LK**. (2015) DHA Suppresses Chronic Apoptosis in the Lung Caused by Perinatal Inflammation. AJP-Lung Cellular and Molecular Physiology Sept; 309(5): L441-8.
65. Geraghty SR, McNamara K, Kwiek JJ, **Rogers LK**, Klebanoff MA, Augustine MA, Keim S.A. (2016) Tobacco metabolites and caffeine in human milk purchased via the Internet. Breastfeeding Medicine, 10: 419-24.
66. Trittmann JK, Gastier-Foster JM, Zmuda EJ, Frick J, **Rogers LK**, Vieland VJ, Chicoine LG, Nelin LD. (2016) A single nucleotide polymorphism in the dimethylarginine dimethylaminohydrolase gene is associated with lower risk of pulmonary hypertension in bronchopulmonary dysplasia. Acta Paediatr, 105 (4): e170-5.
67. Ali M, Heyob KM, **Rogers LK**. (2016) DHA Suppresses Primary Macrophage Inflammatory Responses via Notch 1/ Jagged 1 Signaling. Scientific Reports, Mar 4; 6:22276.

68. Hilbert T, Duerr D, Hamiko M, Frede S, **Rogers L**, Baumgarten G, Hoeft A, Velten M. (2016) Endothelial hyper-permeability following coronary artery bypass grafting: The role of angiopoietin imbalance. Crit Care Med (*in press).*
69. Martinez JT, **Rogers LK**, Kellogg C, Iazbik MC, Couto CG, Pressler BM, Hoepf TM, Radin MJ. (2016) Plasma Vasoprotective Eicosanoid Concentrations in Healthy Greyhounds and Non-Greyhound Dogs. J Vet Intern Med, 30 (2): 583-90.
70. Li Q, Wall SB, Ren C, Velten M, Hill CL, Locy ML, **Rogers LK**, Tipple TE. (2016) The Effect of Thioredoxin Reductase Inhibitors on Murine Neonatal Hyperoxic Lung Injury and Nrf2 Activation. Am J of Respir Cell and Mol Biol. *(in press).*
71. Ali M, Heyob KM, Jacob NK, **Rogers LK**. (2016) DHA Attenuates Lung Cancer Cell Migration and Viability by Alterative Expression of Profilin 1/VASP^{pS157} and Cofilin 1/VASP^{pS239} Axis and miR~17-92 Cluster. Molecular Cancer Therapeutics, *(in press).*
72. Ali M, Heyob KM, **Rogers LK**. (2016) Gelsolin, Vimentin and DHA in regulation of Lung Cancer Cell Migration. Life Sciences, 155: 1-9.
73. Thompson MD, Cismowski MJ, Trask AJ, Lallier SW, Graf AE, **Rogers LK**, Lucchesi PA, Brigstock DR. (2016) Enhanced Steatosis and Fibrosis in Liver of Adult Offspring Exposed to Maternal High Fat Diet. Gene Expr. *(in press*).
74. Graf AE, Lallier SW, Waidyaratne GR, Thompson MD, Tipple TE, Hester ME, Trask AJ, **Rogers LK**. (2016) Maternal high fat diet exposure is associated with increased hepcidin levels, decreased myelination, and neurobehavioral changes in male offspring. Brain, Behavior, and Immunity, *(in revision).*
75. Lallier SW, Graf AE, Waidyarante GR, Rogers LK. (2016) Nurr 1 Expression is Modified by Inflammation in Primary Microglia. NeuroReports, *(in revision).*
76. Lange HLH, Manos BE, Gothard MD, **Rogers LK**, Bonny, AE. (2016) A Randomized Trial of Three Doses of Depot Medroxyprogesterone Acetate in Adolescents. Obstetrics & Gynecology, *(in review).*
77. Valentine CJ, Morrow G, Reisinger A, Dingess KA, Morrow AL, **Rogers LK**. (2016) Pasteurized donor milk in the U.S requires supplementation for the Preterm Infant Despite Pooling. Breastfeeding Medicine *(in review).*
78. Jones NS, Augustine MS, **Rogers LK**. (2016) Stability of Extemporaneously Compounded Bosentan Liquid. Pulmonary Pharmacology and Therapeutics (*in review*).

EDITORIALS

1. **Rogers LK** and Lucchesi PA. (2014) Stress adaptation and the resilience of youth: fact or fiction? Physiology, May 29(3):156.

BOOK CHAPTERS

1. **Rogers LK** and Smith CV. (2003) Coenzyme A and coenzyme A-glutathione disulfide measurements by HPLC. Curr Protocols Toxicol, 6.9.1-6.9.8.
2. Tipple TE and **Rogers LK**. (2012) Methods for the Determination of Plasma or Tissue Glutathione Levels. Methods in Molecular Biology. Edited by Craig Harris and Jason Hansen. Clifton, N.J. Humana Press. 889:315-324.
3. Augustine MS and Rogers LK. (2013) Measurement of Arginine Metabolites: Regulators of Nitric Oxide Metabolism. Current Protocols in Toxicology, Nov 21;58: Unit 17.16.
4. Velten M and **Rogers L**K. (2015) Linkage Between in Utero Environmental Changes and Preterm Birth. The Epigenome and Developmental Origins of Health and Disease. Edited by C. Rosenfeld. Academic Press.

ABSTRACTS *(last five years, total 272)*

1. **Rogers LK**, Britt RD, Heyob KM, Tipple TE and Velten M. Neonatal Inflammation Contributes to Fibrotic Lung Disease in Adult Mice. The Toxicologist 121:477, 2012.
2. Britt RD, Velten M, **Rogers LK**. Moderate Hyperoxia Treatment Increases Airway Resistance During Direct LPS-Induced Lung Injury in Mice. The Toxicologist 121:723, 2012.
3. Velten M, Heyob KM, Welty SE, Tipple TE, **Rogers LK**. Perinatal Inflammation and Decreases in miR29b-1 Expression are Associated with Structural and Functional Pulmonary Deficits in Adult Mice. FASEB J, 26:1062.1, 2012.
4. Valentine CJ, Morrow G, Hodge A, Morrow AL, **Rogers LK**. Docosahexaenoic Acid (DHA) and Amino Acids (AA) are limiting in Pasteurized Donor Milk from a Cross Sectional Sampling in The North American Milk Banks. FASEB J, 26:44.4, 2012.

5. Velten M, Heyob KM, Britt, RD Jr., Valentine CJ, Tipple TE, **Rogers LK**. Maternal DHA Supplementation Improves Lung Growth and Function in Offspring Exposed to LPS and Hyperoxia. FASEB J, 26:644.15, 2012.
6. Britt RD, Velten M, **Rogers LK**. Moderate hyperoxia treatment increases glutathione levels during direct LPS-induced lung injury in mice. FASEB J, 26:692.10, 2012.
7. Tipple TE, Nelin V, Gin Y, **Rogers LK**, Nelin LD. Thioredoxin-1 mediates hypoxia-induced pulmonary artery smooth muscle cell proliferation. FASEB J, 26:873.10, 2012.
8. Robbins ME, Locy ML, Hill CL, Hansen JM, **Rogers LK**, Tipple TE. Oxidized intracellular glutathione redox state in neonatal mice persistently alters alveolar epithelial composition. Pediatr Acad Soc, EPAS: 3841.454, 2012.
9. Haines KM, Heyob KM, Houston RH, Bolon BN, Pierson CR, Velten M, **Rogers LK**. Perinatal Inflammation is Associated with Decreased Intercortical Oligodendrocytes in Adult Mice. Pediatr Acad Soc, EPAS: 1526.439, 2012.
10. Velten M, Britt RD, Heyob KM, Tipple TE, **Rogers LK**. Perinatal Inflammation Negatively Impacts Lung Structure and Function in Adult Mice. Am J Respiratory and Critical Care Med, 185: A1223, 2012.
11. Britt RD, Locy ML, Tipple TE, **Rogers LK**. Pam2CSK, a TLR2 agonist, Increases Chemokine Expression in Mouse Transformed Clara Cells. Am J Respiratory and Critical Care Med, 185: A3703, 2012.
12. Britt RD, Velten M, Nelin LD, **Rogers LK**. Aspirin Reduces MCP-1 Expression in Bronchoalveolar Lavage From Newborn Mice Exposed to Hyperoxia. Am J Respiratory and Critical Care Med, 185: A1824, 2012.
13. **Rogers LK**, Velten M, Tipple TE, Britt RD. Inhibition of Cox-2 Decreases Macrophage Infiltration in Newborn Hyperoxic Lung Injury. Free Rad Biol Med. 53: S127, 2012.
14. Britt RD, Locy ML, **Rogers LK**, Tipple TE. Aurothioglucose Enhances Lung Glutathione Levels and Improves Survival in a Murine Model of Acute Respiratory Distress Syndrome. Free Rad Biol Med 53: S132, 2012.
15. **Rogers LK**, Britt RD, Tipple TE, Velten M. Pharmacological Inhibition of Thioredoxin Reductase I Attenuates Hyperoxic Lung Injury by Augmenting Glutathione Synthesis. Toxicologist, 132: 2026, 2013.
16. Velten, M ; Britt, RD; Heyob, KM; Tipple, TE, **Rogers, LK**. Maternal dietary Docosahexaenoic acid (DHA) supplementation prevents fetal growth restriction and pulmonary fibrosis caused by perinatal inflammation. FASEB Journal, 27: 247.4, 2013.
17. Tipple TE, Britt RD, Locy ML, Velten M, **Rogers LK**. Aurothioglucose Enhances Glutathione Levels And Improves Survival In A Murine Model Of Acute Respiratory Distress Syndrome. Am J Respiratory and Critical Care Med 187: A2109, 2013.
18. Seagraves NJ, Velten M, Heyob KM, **Rogers LK**. Persistent Macrophages In The Lungs Of Mice Exposed To Perinatal LPS And Hyperoxia. Am J Respiratory and Critical Care Med 187: A5360, 2013.
19. Seagraves NJ, Velten M, Heyob KM, **Rogers LK**. Pulmonary Consequences Of Perinatal Inflammation Are Attenuated By Maternal DHA Supplementation. Am J Respiratory and Critical Care Med 187: A3262, 2013
20. Tipple TE, Robbins M, Dakhlallah D, **Rogers LK**, Piper MG. miR-17~92 Cluster Expression Is Decreased In Bronchopulmonary Dysplasia. Am J Respiratory and Critical Care Med 187: A5358, 2013.
21. Graf AE, Velten M, Heyob KM, **Rogers LK.** Impairment of Early Motor Development during Neonatal Hyperoxia Exposure in Mouse Model. Pediatr Acad Soc, EPAS 1540.565, 2013.
22. Davis JM, Parad R, Castile R, Salafia C, **Rogers L**, Greenough A**.** Early Biomarkers in the Prediction of Bronchopulmonary Dysplasia (BPD). Pediatr Acad Soc, EPAS 1547.626, 2013.
23. Robbins ME, **Rogers LK**, Piper MG, Tipple TE**.** Pulmonary miR-17~92 Cluster Expression Is Significantly Decreased in a Murine BPD Model. Pediatr Acad Soc, EPAS 1547.645, 2013.
24. Britt RD, **Rogers LK**, Tipple TE. Aurothioglucose Improves Survival in a Murine Model of Acute Respiratory Distress Syndrome. Pediatr Acad Soc, EPAS 2917.232, 2013**.**
25. Tipple TE, Robbins M, **Rogers LK**, Dakhlallah D, Piper MG. miR-17~92 Cluster Expression Is Decreased in Lungs from Infants with Bronchopulmonary Dysplasia. Pediatr Acad Soc, EPAS 2825.2, 2013.
26. Trittmann JK, **Rogers LK**, Peterson E, Klebanoff MA,. Nelin LD**.** Asymmetric Dimethylarginine Levels Are Elevated in Preterm Neonates with Pulmonary Hypertension and Bronchopulmonary Dysplasia. Pediatr Acad Soc, EPAS 4517.312, 2013.
27. Tipple TE, Moyer S, Pierce D, Hill CL, **Rogers LK**. Aurothioglucose Improves Alveolarization in a Newborn Mouse Model of Bronchopulmonary Dysplasia. Free Radical Biology and Medicine, 65:S63, 2013.
28. Ali M, Heyob KM, Augustine MS, Velten M,and **Rogers LK**. Perinatal Docosahexaenoic Acid Supplementation in Mice Suppresses Chronic Inflammatory Responses through Modulation of Notch Signaling. The Toxicologist,138:1688, 2014.
29. Tipple TE, Hill CL, Pierce DL, Velten M, **Rogers LK**. Thioredoxin Reductase Inhibition Attenuates Hyperoxia-induced Lung Developmental Deficits in Newborn Mice. American Journal of Respiratory and Critical Care Medicine, 189:A5120, 2014.
30. Ali M, Long A, Heyob KM, **Rogers LK**. DHA Suppresses Lung Cancer Cell Migration Through Modulation Of Actin Binding Proteins. American Journal of Respiratory and Critical Care Medicine, 189: A3491, 2014.

31. Ali M, Long A, Heyob KM, Augustine MS, Velten M, **Rogers LK**. Perinatal Inflammation Results In Chronic Responses Modulated By Notch Signaling But Suppressed By Docosahexaenoic Acid Supplementation. American Journal of Respiratory and Critical Care Medicine, 189: A2058, 2014.
32. Robbins ME, **Rogers LK**, Piper MG, Tipple TE. Haplotype-Insufficiency of miR-17~92 Cluster Alters Lung Development in Newborn Mice. Pediatr Acad Soc., EPAS:1537.608, 2014.
33. Nuthakki S, **Rogers LK**, Jin Y, Nelin LD. Association of S-Nitrosoglutathione Reductase (GSNOR) Gene Polymorphism and Necrotizing Enterocolitis**.** Pediatr Acad Soc, EPAS1705.2, 2014.
34. Durrani S, Heyob KM**, Rogers LK.** Maternal Inflammation Exacerbates Neonatal Hyperoxic Lung Injury and Suppresses miR-29b Expression in Mice. Pediatr Acad Soc, EPAS4106.119, 2014.
35. Graf AE, Lallier SW, **Rogers LK**. Expression of Subplate Neuron Markers Is Increased in Brains of Hyperoxia-Exposed Newborn Mice**.** Pediatr Acad Soc, EPAS4116.262, 2014.
36. Valentine CJ, Dingess K, Kleiman J, **Rogers L**, Morrow A. Genetic and Dietary Influences on DHA Composition of Human Milk. ESPGHAN2015-2012
37. Valentine CJ, Dingess K, Anderson AM, Kleiman J, **Rogers L**, Morrow A. Genetic variation in the FADS gene family and Docosahexaenoic Acid (DHA) Levels in Randomized trial of DHA- Supplemented Mothers. ISRHML, 2014.
38. Ali, M, Heyob KM**, Rogers LK**. Inflammation-Induced Changes in Macrophage Function are Attenuated by DHA Treatment. Am J Respir Crit Care Med 191; 2015: A1320.
39. Ali M, Heyob KM, **Rogers LK**. Metastatic Changes Correlate with Actin Binding Proteins and miRNA-17~92 Cluster Expression and are Attenuated by DHA. Am J Respir Crit Care Med 191; 2015: p.A2416.
40. Tipple TE, Yang A, Lee LJ, McGwin G, **Rogers LK**. Decreased Plasma miR-17~92 Cluster Expression in the First Week of Life Correlates with a Subsequent Diagnosis of Bronchopulmonary Dysplasia. Am J Respir Crit Care Med 191; 2015: p.A6085.
41. **Rogers LK**, Heyob KM, Hill C, Jindal N. DHA-Mediated Increases in ARE Transcription Are Not Associated with Nrf-2 Activation in Lung Epithelial Cells. The Toxicologist 144:1, 2015, 152.
42. Durrani D, Heyob KM, Pool CA, **Rogers LK**. Restoration of mIR-29B Expression Improved Alveolarization in Newborn Mice Exposed To Maternal LPS and Neonatal Hyperoxia. Pediatr Acad Soc, EPAS1596.723, 2015.
43. Valentine CJ, Kleiman J, Goliat K, Dingess KA, **Rogers LK**, Morrow AL. Maternal Dietary Needs As a First Step in Fortification of Human Milk in the Neonatal Intensive Care Unit (NICU)-Lessons Learned from a Randomized-Controlled Trial (RCT). EPAS2901.419**,** 2015.
44. Valentine CJ, Dingess KA, Kleiman J, **Rogers LK**, Morrow AL. Genetic Variation in the FADS Gene Family and Docosahexaenoic Acid (DHA) Levels in Randomized Trial of DHA- Supplemented Mothers. EPAS2903.436**,** 2015.
45. Keim S, McNamara K, Augustine M, Klebanoff M, Geraghty S, Kwiek J, **Rogers L**. Evidence of Active Smoking and Caffeine Use by Sellers of Breast Milk Purchased Via the Internet. EPAS1553.385**,** 2015.
46. Graf AE, Lallier SW, Waidyaratne G, Godbout JP, **Rogers LK**. Nurr1 Expression in Microglia Is Decreased in Response To LPS and Hyperoxia-Induced Inflammation. EPAS4132.242**,** 2015.
47. Crowell SA, Chen Y, **Rogers LK**, Nelin LD, and Liu Y. The Role of Glutathione Reductase in Neutrophil Respiratory Burst and ERK Signaling. Aergy, Asthma, and Immunology, 2015.
48. Bonny AE, Lange HLH, Manos BE, Gothard MD, **Rogers LK**. Evidence of a Dose-Response Relationship Between Medroxyprogesterone Acetate and Bone Mineral Density Loss in Adolescents. North American Society for Pediatric and Adolescent Gynecology, 2015.
49. **Rogers LK**, Heyob KM, Pool CA, Durrani S, and Tipple TE. Intranasal Administration of AAV9-miR-29b Improved Alveolarization in Newborn Mice Exposed to Perinatal Inflammation, Gordon Conference on Lung Injury and Repair, Aug 2015.
50. **Rogers LK**, Heyob KM, Ali M. DHA Suppresses Macrophage Inflammatory Responses by Attenuating Notch Signaling Pathways. Society of Toxicology, 2016.
51. Valentine CJ, Kleiman J, Dingess KA , Morrow A, **Rogers LK** . Maternal Docosahexaenoic Acid (DHA) Supplementation Promotes Lean Body Mass in the Preterm Infant. Experimental Biology 2016.
52. Ali M, Heyob KM, and **Rogers LK**. DHA Supplementation Alters Cofilin1/pVASP-S239 Expression, Sub-cellular, Localization, and Suppresses Migration and Proliferation in Lung Cancer Cells. Experimental Biology 2016.
53. Ali M, Heyob KM, and **Rogers LK**. Alterations in the Expression of Profilin1/pVASP-S157 and Cofilin1/pVASP-S239 in Perinatal Inflammation/Neonatal Hyperoxia-Induced Lung Injury. Experimental Biology 2016.
54. Valentine CJ, Kleiman J, Dingess KA , Morrow A, **Rogers LK** . Randomized trial of Maternal Docosahexaenoic Acid (DHA) Attenuates Plasma sRAGE Levels in the Preterm Infant <28 weeks. Pediatric Academic Societies, 2016.

SCIENTIFIC REVIEW ACTIVITES

NIH:

2013-present	Reviewer, Digestive, NIH Kidney and Urological Integrated Review, (ZRG1 DKUS A 82)
2013-present	Standing Reviewer, NIH Systemic Injury and Environmental Exposure (SIEE)
2015	Reviewer, NIEHS Superfund Mechanism (P42) (ZES1 LWJ SF1)
2015	Reviewer, Child Health and Environmental Exposures (P50) (ZES1 LKB-D (CC) 1)
2016	Reviewer, Special Emphasis Panel (ZRG1 CVRS (02) M)

INTERNATIONAL:

2014	Reviewer, Netherlands Organization for Scientific Research, Vidi (ZonMw SA)
2016	Reviewer, Swiss National Science Foundation (Biology and Medicine Division)

FOUNDATION:

2012-present	Reviewer, American Heart Association (Lung)
2012-2014	Reviewer, Tobacco-Related Disease Research Program (TRDRP)
2016	Reviewer, Oklahoma Center for the Advancement of Science and Technology (OCAST)

EDITORIAL AND REVIEW ACTIVITIES

EDITOR/SERVICE ON EDITORIAL BOARD(S):

2011-2015	PLoS One
2012-2015	Cardiovascular Toxicology
2013-Present	Regenerative Medicine
2016- Present	Life Sciences
2016-Present	American Physiological Society Publications Committee

JOURNAL REVIEWER:

Journal of Physiology
AJP, Lung Molecular and Cellular Physiology
Pulmonary Pharmacology and Toxicology
Journal for Translational Research
Cardiovascular Toxicology
Lung
Journal of Nutrition
Toxicology and Applied Pharmacology
Toxicological Sciences
Toxicology Letters
Pediatric Research
Free Radical Biology and Medicine
Life Sciences
Pediatric Pulmonology
Cell Biology and Toxicology
Biochimica et Biophysica Acta (BBA - Molecular Basis of Disease)
PLoS One
Proteome Science
Diabetes
Experimental Lung Research
Pediatrics International

Birth Defects Research (Part A, Clinical and Molecular Teratology)
Journal of Biotechnology and Biomaterials
Pharmacological Research
Cell Physiology and Biochemistry
Journal of Proteomics
Journal of Allergy & Therapy
Journal of Pregnancy and Child Health
Nutrients
Toxicology
Nutrition Research
Respiratory Physiology and Neurobiology
AJP, Heart and Circulatory Physiology
Clinical and Translational Medicine
American Journal of Hypertension
Neonatology
Lipids
Journal of Nutrition and Intermediary Metabolism
Journal of Innate Immunity
Journal of Clinical Medicine

TEACHING

COURSES TAUGHT

Fall, 2008	Pro- and Anti-Inflammatory Properties of Lipids Advances in Lipid Research Seminar The Ohio State University
June, 2009	Pro-oxidants and Antioxidants: What are they and how do they work? Neonatology Grand Rounds Columbus, Ohio
April, 2011	Maternal DHA Supplementation and Functional Outcomes in the Mouse Model Neonatology Grand Rounds Columbus, Ohio
Oct, 2011	Oxygen Toxicity II Neonatology Grand Rounds Columbus, Ohio
June, 2013	Long Chain Fatty Acids: What We Know and What We Still Don't Know. Neonatology Grand Rounds Columbus, Ohio
Oct, 2015	Biohazards and Biosafety School of Public Health, The Ohio State University Columbus, Ohio
March 2016	Fetal Original of Adult (from a cardiovascular perspective) T32, Cardiac Physiology Course The Research Institute at Nationwide Children's Hospital Columbus, Ohio

LECTURES/PRESENTATIONS

INTERNATIONAL

December 2012 Long Term Pulmonary Consequences of Perinatal Inflammation (Invited)
Rheinische Friedrich-Wilhlems-University
Bonn, Germany

NATIONAL

November 2009 Maternal DHA Supplementation Decreases Inflammation and Improves Lung Growth in Hyperoxia-Exposed Newborn Mice (Elected)
Society for Free Radical Biology and Medicine Annual Meeting
San Francisco, California

April 2011 Maternal DHA Supplementation Attenuates Newborn Hyperoxia-Induced Lung Developmental Deficits into Early Adulthood (Elected)
Experimental Biology Annual Meeting
Washington, D.C.

July 2011 DHA is all the "RAGE" in Hyperoxic Lung Injury (Invited)
Baylor College of Medicine
Houston, Texas

October 2014 Perinatal Inflammation: Implications in Adult Lung Disease (Invited)
University of Texas Medical Branch, Galveston
Galveston, Texas

October 2014 Perinatal Inflammation: Implications in Adult Lung Disease (Invited)
Baylor College of Medicine
Houston, Texas

December 2014 Hyperoxic Lung Injury (Invited)
Louisiana State University, School of Veterinary Sciences
Baton Rouge, Louisiana

April 2015 Cardiopulmonary Consequences of Perinatal Exposures (Elected)
Experimental Biology
Boston MA

May 2015 Decreased Plasma miR-17~92 Cluster Expression in the First Week of Life is Correlated with a Subsequent Diagnosis of Bronchopulmonary Dysplasia (Elected)
American Thoracic Society
Denver, Colorado

December 2015 Altered Epigenetic Signaling in Response to Perinatal Inflammation Modifies Cardiopulmonary Development (Invited)
University of Alabama, Birmingham
Birmingham, Alabama

December 2015 Long Chain Fatty Acids: What We Know and What We Still Don't Know
University of Alabama, Birmingham (Invited)
Birmingham, Alabama

February 2016 DHA as a Therapeutic Intervention; Have we found the answer? (Invited)
University of Illinois, Nutrition Program
Champaign/Urbana, IL

April 2016 Maternal Docosahexaenoic Acid (DHA) Supplementation Promotes Lean Body Mass in the Preterm Infant (Elected)
Experimental Biology
San Diego, California

LOCAL/REGIONAL

September, 2006 Oxidative Stress in Alloimmune Hemolytic Disease of the Fetus and Newborn (HDFN).
Wayne State/OSU Maternal Fetal Medicine Bi-monthly Research Meeting
Columbus, Ohio

March, 2007 Hyperoxic Lung Injury: Inflammatory Resolution in Newborn Mice
MFM/Neonatology Monthly Research Seminar
Columbus, Ohio

April, 2007 Correlations Between Illicit Drug Abuse and Premature Birth
Mt. Carmel Nursing School
Columbus, Ohio

April, 2008 Using Biomarkers to Predict Neonatal Outcomes
Ohio Perinatal Retreat
Columbus, Ohio

March, 2008 Biomarkers as Predictors of Neonatal Disease
Ohio Mass Spectrometry Symposia
Columbus, Ohio

April, 2009 Maternal DHA Supplementation Decreases Inflammatory Responses in the Lungs of Newborn Mouse Pups Exposed to Hyperoxia
Ohio Perinatal Society
Newark, Ohio

January 2015 Perinatal Inflammation and Long-Term Consequences
Division of Environmental Health Sciences, School of Public Health
The Ohio State University
Columbus, Ohio

April 2015 Environmental Effects on Cardiopulmonary Development
Division of Pulmonology, College of Medicine
The Ohio State University
Columbus, Ohio

INSTITUTIONAL

October, 2006 Hyperoxic Lung Injury: Inflammatory Resolution in Newborn Mice
Center for Perinatal Research Monthly Seminar
Columbus, Ohio

November, 2007 Biomarkers as Predictors of Neonatal Diseases
Center for Perinatal Research Monthly Seminar
Columbus, Ohio

March, 2008 The ABC's of BPD
Nationwide Children's Hospital Research Institute Research Retreat
Columbus, Ohio

January 2010 Maternal DHA Supplementation Decreases Inflammation in Hyperoxia-Exposed Newborn Mice
Center for Perinatal Research Seminar
Columbus, Ohio

March 2010 DHA Attenuates Inflammation in Hyperoxia-Exposed Newborn Mice
Center for Cardiovascular and Pulmonary Research, Work in Progress
Columbus, Ohio

April 2011 Attenuating Inflammation: Fishing Around for Answers
Bench to Bedside Seminar
Columbus, Ohio

October, 2012 Novel Biomarkers for the Identification of Infants at Risk for the Development or Bronchopulmonary Dysplasia
Clinical and Translational Seminar
Columbus, Ohio

February 2013 Omics Research in 2013
Clinical and Translational Seminar
Columbus, Ohio

November 2014 "Omics" Reseach at NCH
Clinical and Translational Seminar
Columbus, Ohio

December 2015 Altered Epigenetic Signaling in Response to Perinatal Inflammation Modifies Cardiopulmonary Development
Center for Perinatal Research Seminar
The Research Institute at Nationwide Children's Hospital
Columbus, Ohio

TRAINEES

GRADUATE STUDENTS

2005-09 Inimary Toby, PhD
Biomedical Sciences Graduate Program, committee
The Ohio State University
Columbus, Ohio
Role: committee member

2007-2012 Rodney D. Britt, PhD
Biomedical Sciences Graduate Program
The Ohio State University
Role: mentor

2009-2012 Christine Young, MS
Biostatistics, School of Public Health
The Ohio State University
Role: mentor

2012-2014 Kristin Lewis, DVM, PhD
DVM pathology resident, PhD student
The Ohio State University
Role: committee member

POSTDOCTORAL FELLOWS

2008-2011 Markus Velten, MD. PhD.
Role: Mentor
Current: Faculty in Anesthesiology and Intensive Care Medicine, Rheinische Friedrich-Wilhelms University,

2012-2013 Nikki Seagraves, PhD
Role: Mentor
Current: Faculty, University of Central Oklahoma

2014-2016 Mehboob Ali, PhD. (Research Scientist)
Role: Mentor
Current: Sr. Research Scientist, The Research Institute at Nationwide Children's Hospital

POST BACCALAUTEATE

2007-2012 Kelly Dingess

2014-2016 Caylie Pool

UNDERGRADUATE

2008-2009 Andrew White, The Ohio State University
2009-2010 Keton Agashi, The Ohio State University
2011-2012 Lucus Colins, The Ohio State University
2011-2012 Marguerite Sullivan, The Ohio State University
2012-2014 Benjamin Prewitt, Capital University
2013-2014 Nicole Cortizelli, Capital University
2013-2014 Alexander Long, The Ohio State University
2014-2015 Alison Anderson, The Ohio State University
2015 Ashley Gray, The Ohio State University, Summer Internship
2016 Lydia Schneider, Miami University, Summer Internship (SURF recipient)
2016 Sophia Sugar, The Ohio State University, Summer Internship

HIGH SCHOOL STUDENTS

2015 Sundari Vudatala, BODIES program, Metro High School
2016 Saya Mieth, BODIES program, Metro High School

CLINCAL RESIDENTS

2008-2009 Nimmi Manaloor, MD
2012-2015 Nikunj Jindel, MD

CLINICAL FELLOWS

2004-2006 Trent E Tipple, MD,
Role: Mentor
Current: Faculty in Neonatology, UAB

2006-2009 Christina J Valentine, RD, MD
Role: Mentor
Current: Medical Director, Mead Johnston

2006-2009 Daniel Maleske, MD
Role: Scholastic Oversight Committee
Current: Faculty at Nationwide Children's Hospital

2007-2010 Sushama Nuthakki, MD
Role: Scholastic Oversight Committee
Current: Faculty at Texas Children's Hospital

2010-2012 Krista Smith, MD
Role: Mentor
Current: Faculty in Neonatology, Mich. State Univ

2013-2015 Shaheen Duranni, MD
Role: Mentor
Current: Neonatology, private practice

2014- Present Mike Thompson, MD, PhD
Role: Scholastic Oversight Committee
Current: Fellow in Endocrinology

2014- Present Hilary White, MD
Role: Scholastic Oversight Committee
Current: Fellow in Neonatology

CONFERENCES AND SYMPOSIA

LOCAL/REGIONAL DISTINGUISHED ACTIVITIES

1. Community Service (Fundraising): Team Captain, American Heart Association, Columbus, Ohio, Aug 2010

2. Organized Monthly CPR Seminars: Committee for Center for Perinatal Research Seminars, Center for Perinatal Research/The Research Institute at Nationwide Children's Hospital, Columbus, Ohio, United States, 2008-present

NATIONAL/INTERNATIONAL DISTINGUISHED ACTIVITIES

1. Symposia Organizer: Society of Toxicology, 2017
2. Workshop Organizer, American Physiological Society, 2017
3. Symposia Organizer: Experimental Biology, Boston, Mass. 2015.
4. Symposia Organizer: Women in Science, Society for Free Radical Biology and Medicine, San Francisco, California, Jan 2009.
5. Symposia Organizer (Opening Doors): Women in Science, Society for Free Radical Biology and Medicine, Indianapolis, IN, Jan 2008.

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

2004-2014	Society for Free Radical Biology and Medicine
2003- Present	Society of Toxicology
2006- Present	American Thoracic Society
2011- Present	American Physiological Society
2011- Present	American Society for Nutrition
2011- Present	American Heart Association
2012- Present	Sigma Xi
2013- Present	Perinatal Research Society