*Curriculum Vitae*

**Dominick Joseph Lemas, PhD**

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Assistant Professor

Department of Health Outcomes and Biomedical Informatics,

College of Medicine, University of Florida,

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Research Interests

Molecular Epidemiology Microbe-Host Interactions

Human Milk Metabolomics Biomedical Informatics

Obesity & Body Composition Maternal-child Health

Electronic Health Records Precision Health

Education & Training

2002-2006 University of Vermont (UVM), Burlington, VT

**Bachelors of Science** in Biology,

Adviser: Dr. Jim O. Vigoreaux

Training: Mass spectrometry, muscle proteomics, molecular cardiology.

2007-2012 University of Alaska Fairbanks (UAF), Fairbanks, AK

**Ph.D** in Biochemistry and Molecular Biology,

Adviser: Dr. Bert B. Boyer

Training: Community-based participatory research, obesity genetics, nutrition,

gene-by-environment interactions, statistical genetics

2012-2015 University of Colorado Denver (UCD, Aurora, CO

**Post-Doctoral Fellow**, Department of Pediatrics, Section of Neonatology

Mentor: Dr. Jacob E. Friedman

Training: Microbiome, fetal origins of obesity, computational biology, molecular nutrition

Research Support

*Completed*

2003 Helix University of Vermont Undergraduate Research Grant (Principal Investigator)

2004 APLE University of Vermont Undergraduate Research Grant (Principal Investigator)

2007-2008 UAF Chancellors Graduate Research Assistantship (Trainee)

2008-2010 NIH/NIDDK Minority Supplement (R01-DK074842-02S1, Principal Investigator)

2010-2012 UAF Institute of Arctic Biology Graduate Research Assistantship (Trainee)

2012-2014 NIH/NICHD Perinatal T32 Postdoctoral Fellowship (T32-HD07186, Trainee)

2014-2015 NIH/NIDDK F32 Postdoctoral Fellowship (F32-DK101179, Principal Investigator)

2014-2015 University of Colorado Nutrition and Obesity Research Pilot Grant (Principal Investigator)

2015-2016 Robin Hood Foundation Grant (Principal Investigator)

2014-2016 NIH/NIDDK Loan Repayment Program (Principal Investigator)

2016-2018 UF/CTSI Clinical Pilot Grant (Co-Investigator)

2016-2018 NIH/NIDDK Renewal Loan Repayment Program (Principal Investigator)

2016-2018 UF/CTSI Translational Communication Pilot Grant (Principal Investigator)

2018-2019 UF/SECIM Pilot & Feasibility Grant (Principal Investigator)

2019-2020 NIH/NIDDK Loan Repayment Program (Principal Investigator)

*Ongoing*

2019-2023 NIH/NIDDK K01 Career Development Award (K01-DK115632, Principal Investigator)

2020-2022 UF/CTSI Precision Health Pilot Grant (Principal Investigator)

Research Experience

02/2003-05/2006 **Undergraduate Research Assistant**, McNair Scholars Program,

University of Vemont, Burlington, VT

Mentor: Dr. Jim O. Vigoreaux

01/2007-04/2007 **Research Assistant**, Alaska Area Institutional Review Board,

Alaska Native Tribal Health Consortium, Anchorage, AK

Supervisor: Terry Powell

05/2007- 10/2012 **Graduate Research Assistant**, Center for Alaska Native Health Research,

University of Alaska Fairbanks, Fairbanks, AK

Mentor: Dr. Bert B. Boyer

05/2008-08/2008 **Research Assistant**, National Institutional Review Board,

Indian Health Service, Rockville, MD

Supervisor: Dr. Alan Trachtenberg

01/2010- 05/2012 **Visiting Doctoral Scholar,** Nutrition and Obesity Research Center,

University of Alabama at Birmingham, Birmingham, AL

Mentor: Dr. Jose R. Fernandez

11/2012- 07/2015 **Post-Doctoral Fellow**, Department of Pediatrics,

University of Colorado Denver, Aurora, CO

Mentor: Dr. Jacob E. Friedman

08/2015-Present **Assistant Professor**, Department of Health Outcomes and Biomedical Informatics

University of Florida, Gainesville, FL

Supervisor: Dr. William Hogan

Honors and Awards

2002-2006 Scholarship, Indian Health Service Health Professions Scholarship

2007-2010 Scholarship, Alaska Native Tribal Health Consortium Scholarship

2008-2012 Scholarship, Citizen Potawatomi Nation Scholarship

2012 Travel Award, IDeA symposium for Biomedical Research

2013 Travel Award, American Society for Biochemistry and Molecular Biology

2014 Travel Award, Keystone Symposium on the Human Microbiome

2014 Travel Award, NIDDK Microbiome-Host Interactions Workshop

2015 Travel Award, Keystone Symposium on the Human Microbiome

2015 Travel Award, UAB 3rd Metabolomics Workshop

2015 Travel Award, American Diabetes Association National Meeting

2015 Participant, National Research Mentoring Network Grant Writing Workshop

2016 Ad hoc Reviewer, NIH Mechanistic Insights into Birth Cohorts Study Section

2016-2018 Ad hoc Reviewer, NIH Kidney, Nutrition, Obesity, and Diabetes (KNOD) Study Section

2016-2018 Fellow, Keystone Symposia

2019 Ad hoc Reviewer, NIH Infectious, Reproductive Health, Asthma and Pulmonary Conditions

(IRAP) Study Section

Publications (Peer Reviewed)

1. **Lemas DJ**, Wiener HW, O’Brien DM, Hopkins S, Stanhope KL, Havel PJ, Allison DB, Fernandez JR, Tiwari HK, Boyer BB. Genetic polymorphisms in *carnitine palmitoyltransferase 1A* gene are associated with variation in body composition and fasting lipid traits in Yup’ik Eskimos. *Journal of Lipid Research*. 2012. 53(1):175–184. PMID: 22045927
2. **Lemas DJ**, Klimentidis YC, Wiener HW, O’Brien DM, Hopkins S, Allison DB, Fernandez JR, Tiwari HK, Boyer BB. Obesity polymorphisms identified in genome-wide association studies interact with n-3 polyunsaturated fatty acids and modify genetic associations with adiposity phenotypes in Yup’ik people. *Genes & Nutrition. 2013.* 8(5):495-505. PMID: 23526194
3. Aslibekyan S, Vaughn LK, Wiener HW, **Lemas DJ**, Klimentidis YC, Havel PJ, Stanhope KL, O’Brien DM, Boyer BB, Tiwari HK. Evidence for novel genetic loci associated with metabolic traits in Yup’ik people. *American Journal for Human Biology.* 2013. 25(5):673-680. PMID: 23907821
4. Klimentidis YC, **Lemas DJ**, Wiener HW, O’Brien DM, Hopkins S, Allison DB, Fernandez JR, Tiwari HK, Boyer BB. CDKAL1 and HHEX are associated with type-2 diabetes-related traits among Yup'ik people. *Journal of Diabetes.* 2014. 6(3):251-259. PMID: 24112421
5. Vaughn LK, Wiener HW, Aslibekyan S, Allison DB, Havel PJ, Stanhope KL, O'Brien DM, Hopkins SE, **Lemas DJ**, Boyer BB, Tiwari HK. Linkage and association analysis of obesity traits reveals novel loci and interactions with dietary n-3 fatty acids in an Alaska Native (Yup'ik) population. *Metabolism*. 2015. 64(6):689-697. PMID: 25772781
6. **Lemas DJ**, Brinton JT, Shapiro, ALB, Friedman JE, Glueck DH, Dabelea D. Associations of maternal weight status prior and during pregnancy with neonatal cardio-metabolic markers at birth: The Healthy Start Study. *International Journal of Obesity.* 2015.39(10)1437-1442.PMID: 26055075
7. Cardel M, **Lemas DJ**, Jackson KH, Friedman JE, Fernandez JR. Higher Intake of PUFAs Is Associated with Lower Total and Visceral Adiposity and Higher Lean Mass in a Racially Diverse Sample of Children. *Journal of Nutrition*. 2015. 145(9):2146-2152. PMID: 26269238
8. **Lemas DJ**, Lekkas P, Ballif BA, Vigoreaux JO. Intrinsic disorder and multiple phosphorylations constrain the evolution of the flightin N-terminal region. *Journal of Proteomics*. 2016. 135:191-200. PMID: 26691840
9. **Lemas DJ**, Young BE, Baker PR, Tomczik A, Soderborg T, Hernandez T, De la Houssaye B, Robertson CE, Rudolph M, Ir D, Patinkin Z, Krebs NJ, Santorico SA, Weir T, Barbour LA, Frank DN, Friedman JE. Alterations in in human milk leptin and insulin are associated with early changes in the infant intestinal microbiome. *American Journal of Clinical Nutrition*. 2016. 103(3):1291-1300. PMID: 27140533
10. **Lemas DJ**, Yee Shanique, Cacho N, Miller D, Cardel M, Gurka M, Janicke D, Shenkman E. Exploring the contribution of maternal antibiotics and breastfeeding to the development of the infant microbiome and pediatric obesity. *Seminars in Fetal and Neonatal Medicine*. 2016. 21(6):406-409. PMID: 27424917
11. **Lemas DJ**, Klimentidis YC, Aslibekyan S, Wiener HW, O’Brien DM, Hopkins SE, Stanhope KL, Havel PJ, Allison DB, Fernandez JR, Tiwari HK, Boyer BB. Polymorphisms in *stearoyl CoA desaturase* and *sterol regulatory element binding protein* interact with n-3 polyunsaturated fatty acid intake and modify genetic associations with obesity-related anthropometric and metabolic phenotypes in Yup’ik people. *Molecular Nutrition and Food Research*. 2016. 60(12):2642-2653. PMID: 27467133
12. Aslibekyan S, Vaughan LK, Wiener HW, Hidalgo BA, **Lemas DJ**, O’Brien DM, Hopkins SE, Stanhope KL, Havel PJ, Thummel KE, Boyer BB, Tiwari HK. Linkage and association analysis of circulating vitamin D and parathyroid hormone identifies novel loci in Alaska Native Yup'ik people. *Genes & Nutrition*. 2016. 11:23 PMID 27579147
13. Rudolph MC, Young BE, **Lemas DJ**, Palmer CE, Hernandez T, Barbour LA, Friedman JE, Krebs NS, MacLean PS. Early infant adiposity deposition is positively associated with human milk omega-6 to omega-3 fatty acid ratio independent of maternal BMI. *International Journal of Obesity.* 2017. 41(4):510-517. PMID: 27876761
14. Friedman JE, Young BE, **Lemas DJ**, Barbour LA, Frank DN, Santorico SA. Reply to M Gotteland and F Magne. *American Journal of Clinical Nutrition*. 2017. 105(1):234-236. PMID: 28049665
15. Montoya-Williams D, **Lemas DJ**, Spirdya L, Patel K, Neu J, Carson TL. What are optimal cesarean section rates in the U.S. and how do we get there? A review of evidence-based recommendations and interventions. *Journal of Women’s Health*. 2017. 26(12): 1285-1291. PMID: 28825512
16. Cacho NT, Harrison N, Parker L, Padgett KA, **Lemas DJ**, Marcial G, Li N, Carr L, Neu J, Lorca GL. Personalizing the microbiota of donor human milk with mother’s own milk. *Frontiers in Microbiology*. 2017. 8:1470. PMID: 28824595
17. Montoya-Williams D, **Lemas DJ**, Spirdya L, Patel K, Carney O, Neu J, Carson TL. The neonatal microbiome and its partial role in mediating the association between birth by cesarean section and adverse pediatric outcomes. *Neonatology*. 2018. 114(2): 103-111. PMID: 29788027
18. Filipp SL, Cardel M, Hall J, Essner RZ, **Lemas DJ**, Janicke D, Smith SR, Nadglowski, Donahoo WT, Cooper-DeHoff RM, Nelson DR, Hogan WR, Shenkman EA, Gurka MJ. Characterization of Adult Obesity in Florida Using the OneFlorida Clinical Research Consortium. *Obesity Science and Practice*. 2018. 15;4(4):308-317 PMID: 30151226
19. Cardel M, **Lemas DJ**, Lee A, Miller D, Huo T, Klimentidis Y, Fernandez J. Taq1a polymorphism (rs1800497) is associated with obesity-related outcomes and dietary intake in a multi-ethnic sample of children. *Pediatric Obesity*. 2018. PMID: 30253082
20. Bajorek S, Parker L, Li N, Winglee K, Weaver M, Johnson J, Sioda M, Gauthier J, **Lemas DJ**, Jobin C, Lorca G, Neu J, Fodor AA. Initial microbial community of the neonatal stomach immediately after birth. *Gut Microbes*. 2018. PMID: 30404568
21. Soderborg TK, Clark SE, Mulligan CE, Janssen RC, Babcock L, **Lemas DJ**, Johnson LK, Weir T, Lenz LL, Frank DN, Hernandez TL, Kuhn KA, D’Alessandro A, Barbour LA, El Kasmi KC, Friedman JE. The gut microbiome in infants of obese mothers increases susceptibility to obesity and NAFLD in germ-free mice. *Nature Communications*. 2018. PMID: 30367045
22. **Lemas DJ**, Cardel M, Filipp SL, Hall J, Essner RZ, Smith SR, Nadglowski J, Donahoo WT, Cooper-DeHoff RM, Nelson DR, Hogan WR, Shenkman EA, Gurka MJ, Janicke DM. Objectively measured pediatric obesity prevalence using the OneFlorida Clinical Research Consortium. *Obesity Research and Clinical Practice*. 2019. PMID: 30391132
23. **Lemas DJ,** Mack JA, Schoch JJ, Cacho N, Neu J, Thompson L, Hogan WR, Lipori GP, Gurka M. Postnatal pediatric systemic antibiotic episodes during the first three years of life are not associated with mode of delivery. *PlosOne*. 2020. PMID: 32130278
24. Schoch JJ,Miranda N, Garvan CW, Monir RL, Neu J, **Lemas DJ**. Duration of neonatal intensive care unit exposure decreases risk of atopic dermatitis. *Pediatric Dermatology*. 2020. PMID: 33063877
25. Du X, Min J, Prosperi M, Shah CP, Bishnoi R, Hogan WR, **Lemas DJ.** Predicting In-hospital Mortality of Patients with Febrile Neutropenia Using Machine Learning Models. *International Journal of Medical Informatics*. 2020. PMID: 32325370
26. Cardel MI, Manasse S, Krukowski RA, Ross K, Shakour R, Miller D, **Lemas DJ**, Hong YR. COVID-19 Impacts Mental Health Outcomes and Ability and Desire to Participate in Research among Current Research Participants: A Mixed Methods Study. *Obesity*. 2020. PMID: 32845582
27. Chen, L, Flood-Grady E, Hentschel A, Wright L, Mkuu R, Young A, Francois M, Neu J, Parker LA, Shenkman E, Krieger JL, **Lemas DJ**. A qualitative study of pregnant women’s perspectives on antibiotic use for mom and child: implications for developing tailored health education interventions. *Antibiotics*. 2020. PMID: 33076539
28. **Lemas DJ,** Loop MS, Duong M, Schleffer A, Collin C, Patel, K, Ciesielski AL, Ridge Z, Wagner J, Subedi B, Delcher C. Estimating drug consumption during a college football game using liquid chromatography tandem mass spectrometry. *Science of the Total Environment*. 2020. PMID: 33385644
29. Lure AC, Du X, Black EW, Irons R, **Lemas DJ**, Taylor JA, Lavilla O, de la Cruz D, Neu J​. Using Machine Learning Analysis to Assist in Differentiating Between Necrotizing Enterocolitis and Spontaneous Intestinal Perforation: A Novel Predictive Analytic Tool. *Journal of Pediatric Surgery*. 2020. PMID: 33342603
30. Moumne O, Hampe ME, Montoya-Williams D, Carson TL, Neu J, Francois M, Rhoton-Vlasak A, **Lemas DJ**. Implications of the vaginal microbiome and potential restorative strategies on maternal health: A narrative review. *Journal of Perinatal Medicine*. 2020. PMID: 33554571
31. **Lemas DJ**, Wright L, Flood-Grady E, Francois M, Chen L, Hentschel A, Du X, Hsiao CJ, Chen H, Neu J, Theis RP, Shenkman E, Krieger J. Perspectives of pregnant and breastfeeding women on longitudinal clinical studies that require non-invasive biospecimen collection- a qualitative study. *BMC Pregnancy and Childbirth*. 2021. PMID: 33472584
32. Hentschel A, Hsiao CJ, Chen L, Wright LR, Shaw J, Du X, Flood-Grady E, Harle CA, Reeder CF, Francois M, Louis-Jacques A, Shenkman EA, Krieger J, **Lemas DJ**. Perspectives of pregnant and breastfeeding women on participating in longitudinal mother-baby studies involving electronic health records: a qualitative study. *JMIR Pediatrics and Parenting*. 2021. PMID: 33666558
33. Hong YR, Kelly AS, Johnson-Mann C, **Lemas DJ**, Cardel M. Degree of cardiometabolic risk factor normalization in individuals receiving bariatric surgery: evidence from NHANES 2015-2018. *Diabetes Care.* 2021. PMID: 33431421
34. Ross KM, Hong YR, Krukowski RA, Miller DR, **Lemas DJ**, Cardel M. Acceptability of Research and Healthcare Visit During the COVID-19 Pandemic: A Cross-Sectional Study. *JMIR Formative Research*. 2021. PMID:
35. Monir RL, Schoch JJ, Garvan CW, Miranda N, Neu J, **Lemas DJ**. Association between atopic dermatitis and race from infancy to early childhood: A retrospective cohort study. *International Journal of Dermatology*. 2021. PMID: 34378189
36. Aristizabal-Henao JJ, **Lemas DJ**, Griffin EK, Costa KA, Camacho C, Bowden JA. Metabolic profiling of biological reference materials using a multiplatform high-resolution mass spectrometric approach. *Journal of American Society of Mass Spectrometry*. 2021. PMID:

Publications (In Preparation/Under Review)

1. **Lemas DJ**. A natural language processing tool that will extract structured breastfeeding outcomes from mom-baby linked electronic health records. *Journal of the American Medical Informatics Association*. 2021. PMID:
2. Du X, **Lemas DJ.** RUMP: A Container-based Reproducible and Scalable Untargeted Metabolomics Data Processing Pipeline. 2021. PMID:
3. **Lemas DJ**, Du X, Dado-Senn B, Xu K, Magalhaes M, Francois M, Cacho NT, Thompson LA, Parker LA, Neu J, Laporta J, Garrett TJ. Untargeted Metabolomic Analysis of Gestationally Matched Human and Bovine Milk samples at 2-weeks Postnatal. 2021. PMID:

Presented Abstracts

1. **Lemas DJ**, Previs M and Vigoreaux JO. (2005) Mapping and functional characterization of phosphorylation sites in *Drosophila* Flightin. Abstract for undergraduate poster at National SACNAS Conference, September 29- October 01, 2005. Denver, CO.
2. **Lemas DJ** and Crosby-Nash S. (2011) “Molecular Epidemiology: What is it and how can it inform the future of public health? Examples from the CANHR study.” Alaska Public Health Association Conference, January 12, 2011. Anchorage, AK.
3. **Lemas DJ**, Wiener HW, O’Brien DM, Hopkins S, Stanhope KL, Havel PJ, et al. (2012) Genetic polymorphisms in *carnitine palmitoyltransferase 1A* gene are associated with variation in body composition and fasting lipid traits in Yup’ik Eskimos. Abstract for IDeA symposium of Biomedical Research Excellence, June 25-27, 2012. Washington D.C.
4. Cardel M, **Lemas DJ**, Fernandez JR. (2012) Greater consumption of polyunsaturated fatty acid intakes are related to increased lean mass and decreased visceral adiposity in a multi-ethnic sample of children. Abstract for National Obesity Society Meeting, Sept 20-24, 2012. San Antonio, TX.
5. **Lemas DJ**, Klimentidis YC, Wiener HW, O’Brien DM, Hopkins S, Allison DB, Fernandez JR, Tiwari HK, Boyer BB. (2013) Obesity polymorphisms identified in genome-wide association studies interact with n-3 polyunsaturated fatty acids and modify genetic associations with adiposity phenotypes in Yup’ik people. Abstract for the American Society for Biochemistry and Molecular Biology Annual Meeting, April 20-23, 2013. Boston, MA.
6. **Lemas DJ,** Wiener HW, O’Brien DM, Hopkins SE, Stanhope KL, Havel PJ, Allison DB, Fernandez JR, Tiwari HT, Boyer BB. (2013) Genetic Polymorphisms in *SLC2A4* and *SCD* are Associated with Variation in Obesity-related Phenotypes in Yup’ik People. Abstract for National SACNAS Conference, October 3-6, 2013. San Antonio, TX.
7. Aikens R, **Lemas DJ**, De La Houssaye B, Frank D, DeZoeten E, Friedman JE. (2013) Maternal obesity shifts intestinal microbiota, dysregulates gut immunity, and induces hepatic inflammation during lactation in mice. Abstract for Keystone Symposium on the Human Microbiome, April 1-6, 2014. Big Sky, MT.
8. **Lemas DJ**, Young B, Tomczik, Hernandez T, DeLaHoussaye B, Robertson C, Rudolph M, Krebs N, Santorico S, Barbour L, Frank D, Friedman J. (2014). Breast milk leptin, insulin and n6/n3 fatty acids are associated with early differences in microbiome taxa and metagenomic pathways in infants born to lean and obese mothers. NIH/NIDDK Host-Microbiota Interactions, September 9-10, 2014. Bethesda, MD.
9. **Lemas DJ**, Young B, Tomczik, Hernandez T, DeLaHoussaye B, Robertson C, Rudolph M, Krebs N, Santorico S, Barbour L, Frank D, Friedman J. (2014). Breast milk leptin, insulin and n6/n3 fatty acids are associated with early differences in microbiome taxa and metagenomic pathways in infants born to lean and obese mothers. Diabetes and Microbiome Research Symposium, October 27-29, 2014. Chicago, IL.
10. **Lemas DJ**, Young B, Tomczik, Hernandez T, DeLaHoussaye B, Robertson C, Rudolph M, Krebs N, Santorico S, Barbour L, Weir T, Frank D, Friedman J. (2015). Breast milk leptin, insulin and n6/n3 fatty acids are associated with early differences in microbiome taxa and metagenomic pathways in infants born to lean and obese mothers. Keystone Symposium on the Human Microbiome, March 1-6, 2015. Keystone, CO.
11. Soderborg T, **Lemas DJ**, Santorico S, Tomczik A, Borengasser S, Rudolph M, Aikens R, DeLaHoussaye B, Janssen R, Weir T, Frank D, Friedman J. (2015). Normalization of n-3 fatty acids during weaning protects against transfer of maternal Western style diet induced dysbiosis and inflammation. Keystone Symposia on the Human Microbiome, March 1-6, 2015. Keystone, CO.
12. Bajorek S, Winglee K, Gauthier J, Li N, **Lemas DJ**, Parker L, Jobin C, Neu J. (2016) Gastric Aspirate Microbiome in Term Versus Preterm Infants: A Pilot Study. Pediatric Academic Societies. April 30-May 3rd. 2016. Baltimore, MD
13. Neu J, **Lemas DJ**, Gurka MJ, McCafferty J, Carney O. (2017). Antibiotic exposure in pre-term infants and risk of pediatric obesity. OneFlorida Clinical Research Consortium Stakeholder Meeting. January 25-26, 2017. Gainesville, FL.
14. Soderborg T, Strand K, Mulligan C, **Lemas DJ**, Kuhn K, D’alessandro A, Frank D, Janssen R, Barbour LA, El-Kasmi KC, Friedman J. (2017). Gut Microbes in Infants of Obese Mothers Promote Hepatic Inflammation and Pro-Inflammatory Liver Macrophage Polarization in Germ-Free Mice. Keystone Symposia on the Bile Acid Receptors as Signal Integrators in Liver and Metabolism, March 3-7, 2017. Monterey, CA.
15. **Lemas DJ**, Chen H, Carney O., Flood-Grady E, Neu J, Krieger J, Shenkman E (2018). Recruitment and retention of pregnant and breastfeeding mothers for longitudinal clinical microbiome studies. University of Florida College of Medicine Research Day, January 19, 2018. Gainesville, FL.
16. **Lemas DJ**, Chen H, Flood-Grady E, Neu J, Krieger J, Shenkman E (2018). Recruitment and retention of pregnant and breastfeeding mothers for longitudinal clinical microbiome studies. University of Florida Institute for Child Health Policy Research Day, April 5, 2018. Gainesville, FL.
17. **Lemas DJ**, Cardel M, Filipp SL, Hall J, Essner RZ, Smith SR, Nadglowski J, Donahoo WT, Cooper-DeHoff RM, Nelson DR, Hogan WR, Shenkman EA, Gurka MJ, Janicke DM (2018). Pediatric obesity in Florida using the OneFlorida Clinical Research Consortium. University of Florida Institute for Child Health Policy Research Day, April 5, 2018. Gainesville, FL.
18. **Lemas DJ**, Cardel M, Filipp SL, Hall J, Essner RZ, Smith SR, Nadglowski J, Donahoo WT, Cooper-DeHoff RM, Nelson DR, Hogan WR, Shenkman EA, Gurka MJ, Janicke DM (2018). Objectively Measured Pediatric Obesity Prevalence Using the OneFlorida Clinical Research Consortium. The Obesity Society, November 14, 2018. Nashville, TN.
19. **Lemas DJ,** Mack JA, Schoch JJ, Cacho N, Neu J, Thompson L, Hogan WR, Lipori GP, Gurka M (2019). Pediatric systemic antibiotic episodes are not associated with mode of delivery during the first 3 years of life. University of Florida Institute for Child Health Policy Research Day, February 7, 2019. Gainesville, FL.
20. Wright L, Francois M, Chen L, Hentschel A, Schleffer A, Chen H, Flood-Grady E,  Neu J, Shenkman E, Krieger J, **Lemas DJ**. (2019) Recruitment and retention of pregnant and breastfeeding mother for longitudinal clinical microbiome studies. University of Florida Institute for Child Health Policy Research Day, February 07, 2019. Gainesville, FL.
21. Schoch JJ,Miranda N, Garvan CW, Monir RL, Neu J, **Lemas DJ** (2019). Duration of neonatal intensive care unit exposure decreases risk of atopic dermatitis. University of Florida Institute for Child Health Policy Research Day, February 07, 2019. Gainesville, FL.
22. Wright L, Francois M, Chen L, Hentschel A, Schleffer A, Chen H, Flood-Grady E,  Neu J, Shenkman E, Krieger J, **Lemas DJ**. (2019) Recruitment and retention of pregnant and breastfeeding mother for longitudinal clinical microbiome studies. University of Florida Institute College of Medicine Research Day, February 19, 2019. Gainesville, FL.
23. Wright L, Francois M, Chen L, Hentschel A, Schleffer A, Chen H, Flood-Grady E,  Neu J, Shenkman E, Krieger J, **Lemas DJ**. (2019) Recruitment and retention of pregnant and breastfeeding mother for longitudinal clinical microbiome studies. University of Florida Undergraduate Research Symposium, April 04, 2019. Gainesville, FL.
24. **Lemas DJ,** Kirpich A, Francois M, Manfio L, Hentschel A, Cacho N, Thompson L, Parker L, Hogan WR, Neu J, Jobin C, Garret T (2019). An open source bioinformatic pipeline to decipher how the human milk metabolome protects infants from pediatric obesity. American Society for Biochemistry and Molecular Biology, April 8, 2019. Orlando, FL.
25. **Lemas DJ**, Wright L, Francois M, Chen L, Hentschel A, Schleffer A, Chen H, Flood-Grady E,  Neu J, Shenkman E, Krieger J. (2019) Recruitment and retention of pregnant and breastfeeding mother for longitudinal clinical microbiome studies. American Society for Nutrition Conference, June 08 – 11, 2019. Baltimore, MD.
26. **Lemas DJ**, Duong M, Schleffer A, Collins C, Ciesielski AL, Ridge Z, Wagner J, Delcher C (2019). A feasibility study to estimate illicit drug consumption during college football games using liquid-chromatography mass spectrometry. American Chemical Society National Meeting, August 25 - 29, 2019. San Diego, CA.
27. Du X, Manfio L, Kirpich A, Hogan W, Garrett TJ, **Lemas DJ** (2019). A Reproducible Pipeline for Scalable Untargeted Metabolomics Data Analysis. Metabolomics Association of North America, November 15-17, 2019. Atlanta, GA.
28. **Lemas DJ**, Du X, Dado-Senn B, Kirpich A, Francois M, Cacho N, Thompson L, Parker, L, Neu J, Laporta J, Garrett TJ (2019). The human and bovine milk metabolome at 2-weeks postnatal. Metabolomics Association of North America, November 15-17, 2019. Atlanta, GA.
29. Lure A, Black EW, Irons R, Du X, **Lemas DJ**, Lavilla O, de la Cruz D, Neu J (2020). Necrotizing Enterocolitis versus Spontaneous Intestinal Perforation: An Exploratory Study Using Machine Learning. American Academy of Pediatrics, October 02-06, 2020. San Diego, CA.
30. Du X, Cardel MI, Millar DR, Aristizabal Henao JJ, Bowden JA, **Lemas DJ** (2021). Untargeted urinary metabolomic analysis of an acceptance-based therapy intervention for diverse adolescent girls with overweight/obesity. ObesityWeek, Nov. 01-05, 2021. (Submitted)
31. Xu K, Hsiao C, Ballard H, Chachad N, Kim T, Reeder C, Shenkman EA, **Lemas DJ.** (2022). Peripartum women’s perspectives on research study participation in the OneFlorida Clinical Research Consortium. Society for Maternal Fetal Medicine 42nd Annual Pregnancy Meeting, Jan. 31-Feb 05, 2022. Orlando, FL. (Submitted)
32. **Lemas DJ**, Layton C, Ballard H, Xu K, Smulian J, Gurka M, Loop MS, Dayi SI, Hsiao C, Hall J. (2022). County-level analysis of health indicators within the UF Health Perinatal Catchment Area. Society for Maternal Fetal Medicine 42nd Annual Pregnancy Meeting, Jan. 31-Feb 05, 2022. Orlando, FL. (Submitted)
33. Louis-Jacques AF, **Lemas DJ**, Xu K, Urmi S, Groer M. (2022). Maternal gut microbiome during the lactational period. Society for Maternal Fetal Medicine 42nd Annual Pregnancy Meeting, Jan. 31-Feb 05, 2022. Orlando, FL. (Submitted)
34. Smith E, Wen T, **Lemas DJ**, Hall J, Layton C, Reeder C. (2022). Disparity of access to obstetrics care for women of reproductive age within northern Florida. Society for Maternal Fetal Medicine 42nd Annual Pregnancy Meeting, Jan. 31-Feb 05, 2022. Orlando, FL. (Submitted)
35. Reeder C, Smith E, Layton C, Hall J, **Lemas DJ**, Wen T. (2022). Birth outcomes compared in low income and low access census tracts within north central Florida. Society for Maternal Fetal Medicine 42nd Annual Pregnancy Meeting, Jan. 31-Feb 05, 2022. Orlando, FL. (Submitted)
36. Louis-Jacques AF, Sniffen S, Urmi S, Groer M, **Lemas DJ**. Host-microbial interactions in the lactational period using antibiotic depleted specific pathogen free mice model. Society for Maternal Fetal Medicine 42nd Annual Pregnancy Meeting, Jan. 31-Feb 05, 2022. Orlando, FL. (Submitted)

Invited Talks

1. "The Changing Maternal Microbiome and Its Impact on Obesity in the Next Generation" Presented at: American Diabetes Association’s 73rd Scientific Sessions, June 23, 2013. Chicago, IL.
2. “High-throughput sequencing and big data: implications for personalized medicine” Presented at: The Denver Data Science Association, December 10th, 2013. Aurora, CO.
3. “Gut microbiota in obesity: reasons for excitement and reasons for skepticism” Presented at: American Society for Nutrition Obesity RIS Business Meeting, Tuesday April 5, 2016. San Diego, CA.
4. “Getting to the guts of obesity- implications of the microbiome during pregnancy and early life” Presented at: Canadian Diabetes Association and the Canadian Society of Endocrinology and Metabolism, October 28th, 2016, Ottawa, CA.
5. “Getting to the guts of obesity- implications of the microbiome during pregnancy and early life” Presented at: University of Florida Animal Molecular Cell Biology Seminar Series, March 31st, 2017, Gainesville, FL.
6. “Early changes in the infant microbiome are driven by human milk insulin and leptin” Presented at: Pediatric Academic Societies Meeting, May 9, 2017, San Francisco, CA.
7. “Human milk metabolomics and microbe-host interactions associated with pediatric obesity” Presented at: Keystone Symposia Scientific Advisory Board Meeting, June 17th, 2017, Keystone, CO.
8. “Tissue collection and data management in clinical microbiome studies” Presented at: 6th Annual Clinical and Translational Science Award (CTSA) Ontology Group, October 26th, 2017, Ann Harbor, MI.
9. “Tissue collection and data management in clinical microbiome studies” Presented at: University of Florida Microbiome Working Group, February 1st, 2019, Gainesville, FL.
10. “Human milk metabolomics and infant health outcomes” Presented at: University of Florida Animal Molecular Cell Biology Seminar Series, March 22nd, 2019, Gainesville, FL.
11. “The Breastfeeding and EArly Child Health (BEACH) Study” Presented at: University of Florida Maternal and Fetal Medicine Fellowship Conference, June 13, 2019, Gainesville, FL.
12. “Human milk metabolomics and microbe-host interactions associated with pediatric obesity” Keynote lecture presented at: Alaska IDeA Network of Biomedical Research Excellence (INBRE) Research Retreat, September 21-22, 2019, Talkeetna, AK.
13. “Infant nutrition and breastfeeding in the era of precision health” Presented at: University of Florida Nutritional Science Seminar, October 03, 2019, Gainesville, FL.
14. “Infant nutrition and breastfeeding in the era of precision health” Presented at: University of Florida Physiological Science Seminar, October 08, 2019, Gainesville, FL.
15. “Infant nutrition and breastfeeding in the era of precision health” Presented at: Florida State University Food, Nutrition and Exercise Science Seminar, October 16, 2019, Tallahassee, FL.
16. “Infant nutrition and breastfeeding in the era of precision health” Presented at: Emory University Molecular Nutrition Science Seminar, November 14, 2019, Atlanta, GA.
17. “Infant nutrition and breastfeeding in the era of precision health” Presented at: University of Florida ObGyn Continuing Medical Education Seminar, December 20, 2019, Gainesville, FL.

Computing Experience and Training

Statistical Analysis Systems (SAS) software

R programming language

Statistical Analysis for Genetic Epidemiology (SAGE)

Python

Professional Membership

Society for Advancement of Chicanos and Native Americans in Science (SACNAS)- member since 2009

American Society for Biochemistry and Molecular Biology (ASBMB)- member since 2012

American Diabetes Association (ADA)- member since 2013

The Obesity Society (TOS) – member since 2013

American Society for Nutrition (ASN)- member since 2016

Short Course Training

2009 Statistical Genetics and Statistical Genomics, University of Alabama at Birmingham, July 13-17, 2009. Honolulu, HI

2009 Dynamics of Complex Systems Summer School, University of Alaska Fairbanks, August 03-04, 2009. Fairbanks, AK

2010 Cross-cultural and Community-based Participatory Research training, University of Alaska Fairbanks, Fairbanks, AK, January- May, 2010, Fairbanks, AK

2011 Statistical Genetics and Statistical Genomics, University of Alabama at Birmingham,

August 18-22, 2011. Birmingham, AL

2011 Grant Writing and Leadership Development Seminar, FASEB, November 18-19, 2011. Chantilly, VA

2012 Next-Generation Sequencing, University of Alabama at Birmingham, December 10-13, 2012. Birmingham, AL

2014 UT Health Science Center in San Antonio Translational Science in Perinatal Biology, April 27- May 3, 2014. San Antonio, TX

2014 Presenting Data and Information, Edward Tufte,

August 11, 2014. Denver, CO

2015 3rd Metabolomics Workshop, University of Alabama at Birmingham,

June 15-18, 2015, Birmingham, AL

2015 National Research Mentoring Network Grant Writing, University of Colorado Anschutz Medical Campus

October 21-23, 2015, Aurora, CO

2016 Selecting a Valid Sample Size for Longitudinal and Multilevel Study Design Workshop, University of Florida, May 18-20, 2016, Gainesville, FL

2018 Certified Lactation Counselor Training, Healthy Children Project, April 16-20, 2018, Boulder, CO

Teaching Experience

Fall 2016 Lecturer, GMS 6854: Applied Topics in Clinical Effectiveness Research,

University of Florida College of Medicine, Gainesville, FL.

Fall 2017 Lecturer, GMS 6804: Translational Bioinformatics,

University of Florida College of Medicine, Gainesville, FL.

Fall 2018 Lecturer, GMS 6804: Translational Bioinformatics,

University of Florida College of Medicine, Gainesville, FL.

Summer 2019 Lecturer, GMS 7887: Health Outcomes and Biomedical Informatics Seminar,

University of Florida College of Medicine, Gainesville, FL.

Spring 2020 Lecturer, GMS 6804: Translational Bioinformatics,

University of Florida College of Medicine, Gainesville, FL.

Mentoring Experience

2014 Angela Tomczik, B.S., University of Colorado Boulder, Student Research Assistant, Aurora, CO

2014 Taylor Soderborg, B.S., University of Colorado Anschutz Medical Campus, Graduate Student, Aurora, CO

2015 Sarah Bajorek, M.D., University of Florida, Neonatal Fellow, Gainesville, FL

2016 Diana Montoya-Williams, M.D., University of Florida, Neonatal Fellow, Gainesville, FL

2018 Keval Patel, University of Florida, Undergraduate Research Assistant, Gainesville, FL

2019 Lauren Wright, University of Florida, Undergraduate Research Assistant, Gainesville, FL

2020 Austen Hentschel, University of Florida, Undergraduate Research Assistant, Gainesville, FL

2021 Lynn Chenn, University of Florida, Undergraduate Research Assistant, Gainesville, FL

Professional Service

*Peer-Reviewer*

Obesity Journal Lipids

Journal of Nutrigenetics and Nutrigenomics Journal of Lipid Research

Human Heredity American Journal of Clinical Nutrition

New England Journal of Medicine Pediatric Obesity

Journal of Parenteral and Enteral Nutrition

*University of Colorado Denver Postdoctoral Association*

Chaired Postdoctoral Mentor Award Committee

Member of Postdoctoral Research Day Committee

Founding President of SACNAS Professional Chapter

References

Dr. Christian Jobin, PhD, University of Florida College of Medicine, Email: [Christian.Jobin@medicine.ufl.edu](mailto:Christian.Jobin@medicine.ufl.edu)

Dr. Josef Neu, MD, University of Florida College of Medicine, Email: [neu@ufl.edu](mailto:neu@ufl.edu)

Dr. Jed Friedman, PhD, University of Colorado Denver, Department of Pediatrics, Biochemistry and Molecular Genetics, 12801 East 17th Ave, Mail Stop 8106, RC1-South, Room 7127, Aurora, CO 80045. Phone: (303)-724-3983. Email: jed.friedman@ucdenver.edu