

CURRICULUM VITAE
Laura E. Coats, PhD, RD

I. Personal Data:

Citizenship Status: US Citizen Place of Birth: Baton Rouge, Louisiana
Office Address: University of Mississippi Medical Center
 2500 North State Street, Jackson, MS 39216
 Phone: 662-312-9026 Email: lcoats@umc.edu

II. Education:

2016-2020 Doctor of Philosophy in Physiology and Biophysics, School of Graduate Studies in Health Sciences University of Mississippi Medical Center, Jackson, MS
 Dissertation Title: Pathogenesis of Intrauterine Growth Restriction and Developmental Programming of Cardiovascular Disease
 Mentor: Dr. Barbara T. Alexander

2015-2016 Dietetic Internship, University of Southern Mississippi, Hattiesburg, MS

2013-2016 Master of Science in Food Science, Nutrition, and Health Promotion, Mississippi State University, Mississippi State, MS
 Thesis Title: Understanding Fruit and Vegetable Consumption in College Freshmen 18-24 Years Old at Mississippi State University
 Mentor: Dr. Sylvia H. Byrd

2008-2012 Bachelor of Science in Secondary Education, Mississippi State University, Mississippi State, MS
 Concentration: Biology
 Minor: Exercise Physiology
 Graduated: Magna cum laude

III. Certifications:

- Registered Dietitian Nutritionist, 2016
- Chemistry (7-12) Teaching Endorsement, 2015
- Biology (7-12) Teaching Endorsement, 2013
- General Sciences (7-12) Teaching Endorsement, 2013
- Physical Education (K-12) Teaching Endorsement, 2013

IV. Professional Positions:

2021-Present Postdoctoral Research Fellow, Department of Physiology and Biophysics, University of Mississippi Medical Center

2016-2020 Graduate Student, University of Mississippi Medical Center, Department of Physiology and Biophysics, Jackson, MS

2015-2016 Dietetic Intern, G.V. "Sonny" Montgomery Medical Center, Jackson, MS

2013-2015 Graduate Teaching Assistant, Mississippi State University, Mississippi State, MS

2012-2013 High School Biology and Human Anatomy and Physiology Teacher, Southaven High School, Southaven, MS

V. Honors:**1. Postdoctoral Fellow Honors**

- Physiologist in Training, President, University of Mississippi Medical Center (2021-Present)

2. Doctor of Philosophy Student Honors

- Regions Outstanding Graduate Research Award, University of Mississippi Medical Center (April 2021)
- Caroline tum Suden Travel Award, Experimental Biology (April 2020)
- Featured trainee, *The Physiologist Magazine*, American Physiological Society (Jan 2020)
- Vice President, Graduate Student Body, University of Mississippi Medical School (2019-2020)
- Onsite Poster Award, Research Day, University of Mississippi Medical Center (Oct 2019)
- Onsite Poster Award, American Heart Association, Council on Hypertension Meeting (Sep 2019)

3. Masters of Science Student Honors

- Academy of Nutrition and Dietetics Foundation: Mississippi Ethel Summerour Scholarship (Fall 2015)
- Gamma Sigma Theta Honor Society (2014-2015)

4. Bachelors of Science Student Honors

- President's List, Mississippi State University (Spring 2012)
- Dean's List, Mississippi State University (2009-2011)
- Montgomery Leadership Honors Program, Mississippi State University (2009-2011)
- President's List, Mississippi State University (Fall 2008)

VI. National and Regional Professional Association Affiliations:

- American Heart Association (2019-Present)
- Community Health Advocate (2017-Present)
- American Physiological Society (2016-Present)
- Group on Women in Medicine and Science (2016-Present)
- Academy of Nutrition and Dietetics (2014-Present)
- University of Mississippi Medical Center Graduate Student Body (2016-2020)
- University of Mississippi Medical Center Associated Student Body (2016-2020)
- Gamma Sigma Theta Honor Society (2014-2015)

VII. University Teaching:

- Culinary Medicine, M1 Elective, Spring 2020/2021
- PHYSIO 611 Medical Physiology Laboratory, Spring 2019
- FNH 3723 Community Nutrition, Spring 2014/2015
- FNH 1001 First Year Experience Cooking Basics: Iron Chef Bully, Fall 2013/2014
- FNH/HS 2203 Science of Food Preparation, Fall 2013/2014

VIII. Service and Leadership:**1. Departmental**

- Physiologist in Training, President, University of Mississippi Medical Center (2021-Present)
- Invited Speaker, Graduate School Recruitment, University of Mississippi Medical Center (Nov 2020)
- Vice President, Graduate Student Body, University of Mississippi Medical Center (2019-2020)
- Physiology Understanding (PhUn) Week, Group Leader, Mississippi Children's Museum (Nov 2017-2019)
- Discovery U, Volunteer, Mississippi Children's Museum (April 2018/2019)
- Operation Shoestring, Nutrition Educator, University of Mississippi Medical Center (Oct 2019)

2. Institutional

- UMMC COVID-19 Reserves, University of Mississippi Medical Center (April 2020)
- Spooky U, Volunteer, University of Mississippi Medical Center (Oct 2018/2019)
- Wellness Week, Volunteer Nutrition Educator, University of Mississippi Medical Center (April 2019)
- Sugar Intake Education, Nutrition Educator, University of Mississippi Medical Center (April 2019)
- High School Visit Day, Volunteer, University of Mississippi Medical Center (Nov & Jan 2018-2019)
- Healthy Teens Rally, Volunteer, Mississippi Coliseum (Sep 2017)
- Fun with Food Camp, Group Leader, Mississippi State University (July 2014)
- Montgomery Leadership Honors Program, Group Leader, Mississippi State University (2009-2011)

3. Community

- Public Health Week, Volunteer Nutrition Educator, Wingfield High School (April 2017)
- Graduate Student Research Symposium, Judge, University of Southern Mississippi (March 2017)
- Moonlight Food Market, Volunteer, Mississippi Food Network (March 2016)
- Seal Harris Diabetes Camp, Volunteer, Birmingham, AL (July 2015)
- Mississippi High School Science Fair, Judge, Mississippi State University (March 2015)

4. Reviewer Activity

Journal of Hypertension

Frontiers in Pediatrics

Biomedicine and Pharmacology

IX. Mentorship:

- Mentor, *Kaleb Newton*, Summer Undergraduate Research Experience, University of Mississippi Medical Center (Summer 2021)
- Mentor, *Chandler Winstead*, Medical Student Research Program, University of Mississippi Medical Center (Summer 2021)
- Mentor, *Gabrielle Chamoun*, Medical Student Research Program, University of Mississippi Medical Center (Summer 2020)
- Mentor, *Allison Ariatti*, Medical Student Research Program, University of Mississippi Medical Center (2019-2020)

X. Active Funding:

- NIH NHLB T32HL 105324 (Granger: PI). "Hypertension and Cardiorenal Diseases Research Training Program." Role: Postdoctoral Research Fellow (Postdoctoral Research Fellow)

XI. Invited Presentations:

1. Podcast Recording: Soluble Guanylate Cyclase Stimulation in Late Gestation does not Mitigate Asymmetrical Intrauterine Growth Restriction and Cardiovascular Risk in Offspring. **Coats, L.E.**, Alexander, B.T., Banek, C.T., and Gouloupoulou, S. American Journal of Physiology: Heart and Circulatory Physiology. (April, 2021).
2. Pathogenesis of Intrauterine Growth Restriction and the Developmental Programming of Cardiovascular Disease. **Coats, L.E.** Washington University, St. Louis, MO. (November, 2020).
3. Soluble Guanylate Cyclase as a Maternal Therapeutic in a Rodent Model of Intrauterine Growth Restriction: What about the Offspring? **Coats, L.E.**, Davis, G., Bamrick, D., Bakrania, B., Ojeda, N. and Alexander, B.T. Physiology Seminar Series. University of Mississippi Medical Center, Jackson, MS. (November, 2019).

4. Placenta Ischemia Influences Developmental Programming in Growth Restricted Offspring. **Coats, L.E.**, Davis, G., Bamrick, D., Bakrania, B., and Alexander, B.T. Experimental Biology, Orlando, FL. (April, 2019).
5. Activation of G Protein-Coupled Estrogen Receptor, with a GPER Agonist, Reduces Blood Pressure in Female Growth-Restricted Rats in Later Life. Davis, G., Bamrick, D., Newsome, A., **Coats, L.E.**, and Alexander, B.T. Experimental Biology, Orlando, FL. (April, 2019)

XII. Peer Reviewed Publications:

1. Banek, C.T., Bradshaw, J.L., **Coats, L.E.**, Alexander, B.T., and Gouloupoulou, S. Getting It Right: Preventing Drift in Baseline Cardiovascular Phenotype When Using Sprague Dawley Rats. *American Journal of Physiology: Heart and Circulatory Physiology*. Accepted, July 2021.
2. Rivera-Gonzalez, O., Wilson, N., **Coats, L.E.**, Taylor, E., and Speed, J. Endothelin Receptor Antagonism Improves Glucose Handling, Dyslipidemia, and Adipose Tissue Inflammation in Obese Mice. *Clinical Science*. In press, July 2021.
2. **Coats, L.E.**, Bakrania, B., Bamrick-Fernandez, D., Ariatti, A.M., Rawls, A., Ojeda, N., and Alexander B.T. Soluble Guanylate Cyclase Stimulation in Late Gestation does not Mitigate Asymmetrical Intrauterine Growth Restriction and Cardiovascular Risk in Offspring. *American Journal of Physiology: Heart and Circulatory Physiology*, 2021; 320(5):H1923-H1934. Doi: 10.1152/ajpheart.00033.2021
3. **Coats, L.E.**, Bamrick, D., Ariatti, A., Bakrania, B., Rawls, A., Ojeda, N., and Alexander, B.T. Stimulation of Soluble Guanylate Cyclase Diminishes Intrauterine Growth Restriction in a Rat Model of Placental Ischemia. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*, 2021; 320(2): R149-R161. Doi: 10.1152/ajpregu.00234.2020
4. **Coats, L.E.**, Aboul-Enein, B.H., Dodge, E., Benajiba, N., Kruk, J., Khaled, B.M., Diaf, M., and Herrag, S.E. Perspective of Environmental Health Promotion and the Mediterranean Diet: A Thematic Narrative. *Journal of Hunger and Environmental Nutrition*, 2020: 1-23. Doi: 10.1080/19320248.2020.1777242
5. Davis, G.K., Suttira, I., Newsome, A., **Coats, L.E.**, Bamrick, D., Ojeda, N., and Alexander, B.T. The Role of Androgen Receptor Blockade on Increased Blood Pressure in Female Intrauterine Growth Restricted Offspring. *Hypertension*. 2019; 74(4):975-982.
6. **Coats, L.E.**, Davis, G.K., Newsome, A., Ojeda, N., and Alexander, B.T. Low Birthweight. Blood Pressure, and Renal Susceptibility. *Hypertension Reports*, 2019; 21(8):62.
7. **Coats, L.E.**, Bernstein, J., Dodge, E., Bechard, L., and Aboul-Enein, B.H. Food-Based Dietary Guidelines of Arabic Speaking Countries: a Culturally Congruent Profile. *Public Health Nutrition*, 2018; 22(6).
8. Moseley, M., **Coats, L.E.**, and Poe, P. "I Know Nothing": Perceived Barriers to Fruit and Vegetable Consumption among Mississippi College Freshmen Living on Campus. *International Journal of Humanities and Social Science*, 2017; 12(7).

XIII. Abstracts:

1. Endothelin Inhibits Adiponectin Production via ET_B Receptor Activation on Adipocytes. Rivera-Gonzales, O., **Coats, L.E.**, Wilson, N.A., Speed, J. S. Council on Hypertension (in submission, September 2021).
2. Tumor Necrosis Factor Alpha Improves Placental Perfusion and Attenuates Intrauterine Growth Restriction in a Rodent Model of Preeclampsia. **Coats, L.E.**, Rawls, A.Z., Cockrell, K.L., Chamoun, G.M., and Alexander, B.T. Council on Hypertension, Virtual (September 2020).
3. Soluble Guanylate Cyclase in a Rodent Model of Preeclampsia: Is Benefit in the Mother Associated with Benefit in the Offspring?. **Coats, L.E.**, Ariatti, A., Bakrania, B., Bamrick, D., Ojeda, N., and Alexander, B.T. Experimental Biology, San Diego, CA. (April, 2020).
4. Endothelin Type A Receptor Blockade is Beneficial Against Age-Related Increased Cardiovascular Risk in Female Intrauterine Growth Restricted Offspring. Ariatti, A., **Coats, L.E.**, Ojeda, N., Intapad, S., and Alexander, B.T. Experimental Biology, San Diego, CA. (April, 2020).

5. Gestational Interventions and Fetal Outcomes in a Rat Model of Intrauterine Growth Restriction. **Coats, L.E.**, Davis, G., Bamrick, D., Bakrania, B., Ojeda, N., and Alexander, B.T. Research Day, University of Mississippi Medical Center, Jackson, MS. (October, 2019).
6. Gestational Interventions and Fetal Outcomes in a Rat Model of Intrauterine Growth Restriction. **Coats, L.E.**, Davis, G., Bamrick, D., Bakrania, B., Ojeda, N., and Alexander, B.T. Hypertension. New Orleans, LA. (September, 2019).
7. Placenta Ischemia Influences Developmental Programming in Growth Restricted Offspring. **Coats, L.E.**, Davis, G., Bamrick, D., Bakrania, B., Ojeda, N., and Alexander, B.T. Experimental Biology, Orlando, FL. (April, 2019)
8. Activation of G Protein-Coupled Estrogen Receptor, with a GPER Agonist, Reduces Blood Pressure in Female Growth-Restricted Rats in Later Life. . Davis, G.K., Bamrick, D., Newsome, A., **Coats, L.E.**, and Alexander, B.T. Experimental Biology, Orlando, FL. (April, 2019)
9. Placenta Ischemia Influences Developmental Programming in Growth Restricted Offspring. **Coats, L.E.**, Davis, G., Bamrick, D., Bakrania, B., Ojeda, N., and Alexander, B.T. Research Day, University of Mississippi Medical Center, Jackson, MS (October, 2018)
10. Fruit and Vegetable Consumption in College Freshmen at Mississippi State University. **Coats, L.E.**, Fountain, B., Buys, D., Rader, N., Poe, P., and Byrd, S.H. Food Science and Nutrition Conference Exposition, Nashville, TN. (October, 2015).