

Robin Shoemaker, PhD

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Current Position

Assistant Professor, Jan 2018 – present

Department of Dietetics and Human Nutrition, College of Agriculture, Food, and Environment, School of Human Environmental Sciences, University of Kentucky, Lexington KY

Courses taught:

Research Methods in Nutrition and Food Science (DHN 600), Spring 2018- present

Postdoctoral Education

 May 2015-Dec 2017, Department of Physiology and Nutritional Sciences, University of Kentucky Mentor: Lisa Cassis, PhD

Project: Role of adipocyte angiotensin-converting enzyme 2 (ACE2) in regulation of obesity-hypertension

Graduate Education

 PhD, May 2015, Department of Pharmacology and Nutritional Sciences, University of Kentucky Mentor: Lisa Cassis, PhD

Project: Regulation of pancreatic β-cell function by the renin-angiotensin system in type 2 diabetes

Publications

- 1. Erin Jackson, **Robin Shoemaker**, Nika Larian, Lisa Cassis. Adipose tissue as a site of toxin accumulation. *Comprehensive Physiology*. 2017. In press
- 2. Wang Y; **Shoemaker R**; Powell D; Su W; Thatcher S; Cassis, L. Differential effects of Mas receptor deficiency on cardiac function and blood pressure in obese male and female mice. *Am J Physiol Heart Circ Physiol.* 2017 Mar 1;312(3): H459-468
- 3. **Shoemaker, R**; Yiannikouris, F; Thatcher, S; Cassis, L. ACE2 Deficiency Reduces Beta-Cell Mass and Impairs Beta-Cell Proliferation in Obese C57BL/6 Mice. *Am J Physiol Endocrinol Metab.* 2015 Oct 1;309(7):E621-31
- 4. Yiannikouris F, Wang Y, **Shoemaker R**, Larian N, Thompson J, English VL, Charnigo R, Su W, Gong M, Cassis LA. Deficiency of angiotensinogen in hepatocytes markedly decreases blood pressure in lean and obese male mice. *Hypertension*. 2015 Oct;66(4):836-42
- Wang, Y; Shoemaker, R; Thatcher, S; Yiannikouris, F; English, V; Cassis, L. Administration of 17β-Estradiol to Ovariectomized Obese Female Mice Reverses Obesity-hypertension Through an ACE2-Dependent Mechanism. Am J Physiol Endocrinol Metab. 2015 Jun 15;308(12):E1066-75
- 6. Nicki A. Baker *, **Robin Shoemaker***, Victoria English, Nika Larian, Manjula Sunkara, Andrew J. Morris, Mary Walker, Frederique Yiannikouris, and Lisa A. Cassis. Effects of Adipocyte Aryl

- Hydrocarbon Receptor Deficiency on PCB-Induced Disruption of Glucose Homeostasis in Lean and Obese Mice. *Environ Health Perspect*. Environ Health Perspect. 2015 Oct;123(10):944-50
- 7. Putnam, K; **Shoemaker, R**; Yiannikouris, F; Cassis, L.A. "The Renin Angiotensin System: A Target of and Contributor to Dyslipidemias, Altered Glucose Homeostasis and Hypertension of the Metabolic Syndrome", *Am J Physiol Heart Circ Physiol* 2012 Mar 15;302(6):H1219-30
- 8. Gupte M; Thatcher SE; Boustany-Kari CM; **Shoemaker R**; Yiannikouris F; Zhang X; Karounos M; Cassis LA. "Angiotensin converting enzyme 2 contributes to sex differences in the development of obesity hypertension in C57BL/6 mice" *Arterioscler Thromb Vasc Biol.* 2012 Jun;32(6):1392-9

Posters/Presentations

- September, 2016: AHA- Council for High Blood Pressure
 - o Awarded Trainee poster prize
- May, 2016: Barnstable Brown Diabetes and Obesity Research Day (poster)
- October, 2014: Gill Heart Cardiovascular Research Day (poster and selected podium presentation)
- September, 2014: AHA-Council for High Blood Pressure (selected podium presentation)
- May, 2014: Barnstable Brown Diabetes and Obesity Research Day (poster)
 - Awarded 1st place poster winner
- March, 2014: Gordon Angiotensin Seminar (invited podium presentation) and Conference (poster)
- October, 2013: Gill Heart Cardiovascular Research Day (poster)
- September, 2013: AHA-Council for High Blood Pressure
 - Received a travel award and selected for podium presentation in the category of Top Trainee Abstracts
- May, 2013: Barnstable Brown Diabetes and Obesity Research Day (poster and selected podium presentation)
 - Awarded 2nd place poster winner
- May, 2012: Barnstable Brown Diabetes and Obesity Research Day (poster)
- February, 2012: Gordon Angiotensin Conference (poster)
- October, 2011: Gill Heart Cardiovascular Research Day (poster)
- May, 2011: Barnstable Brown Diabetes and Obesity Research Day (poster)

Funding/Fellowships

- January 1, 2016 December 31, 2017: AHA Postdoctoral Fellowship (17POST33410015)
- July 1, 2012 June 30 2014: AHA Predoctoral Fellowship (12PRE12050430)
- April 1, 2012 June 30, 2012: NIH Interdisciplinary Cardiovascular Training Grant (T32HL072743)

Teaching

- January 2013-May 2015, Adjunct Faculty, Bluegrass Community and Technical College
 - o Bio139 Physiology lecture (responsible for creating all lecture materials), 4 semesters
 - o Bio139L Physiology Lab, 3 semesters
- August 2003-December 2004, Student Teaching Assistant, University of Colorado, Boulder
 - o Environmental Chemistry, 1 semester
 - o Chemistry for Non-Majors, 2 semesters

Mentorship

• June 2017 – present, Mentor, Summer Undergraduate Research Experience in Environmental Health Sciences Program, University of Kentucky

- 2011, Mentor, STEP-UP High School Summer Research Program (NIH NIDDK), University of Kentucky
- 2011-present, informal mentoring of many high school, undergraduate, and graduate students

Professional Memberships

- o American Heart Association, 2012-present (179544871)
- o American Physiological Society: 2014-present (00169027)

Undergraduate Education

- BA in Chemistry, 2004, University of Colorado-Boulder
- Research Project (Analytical Chemistry): Systematic Investigations of a Dual Channel Virus Counter
 - o Publication: Stoffel, C.L.; **Finch, R**.; Christensen, K.; Edwards, D.; Rowlen, K.L. "Rapid Determination of Baculovirus Titer by a Dual Channel Virus Counter", *American Biotechnology Laboratory* 2005 *37*(22), 24-25.
- Funding/Fellowships:
 - o 2003-2004 Undergraduate Fellow: NSF K-12 Science Outreach Education Grant
 - o 2003-2004 Undergraduate Research Opportunities Program: Individual Grant
- Awards:

2004: American Chemical Society Award in Analytical Chemistry

2004: Undergraduate NSF Fellowship Award

2004: Undergraduate Teaching Excellence Award