AARON J. TRASK, Ph.D.

Address Center for Cardiovascular and Pulmonary Research

The Research Institute at Nationwide Children's Hospital

700 Children's Drive, WB4135

Columbus, Ohio 43205 Phone: 614.355.5760 Fax: 614.355.5725

E-mail: aaron.trask@nationwidechildrens.org

EDUCATION:

2009-2013 **Postdoctoral Fellowship - Cardiovascular Physiology & Pharmacology**

Center for Cardiovascular and Pulmonary Research The Research Institute at Nationwide Children's Hospital

Columbus, Ohio

Pamela A. Lucchesi, Ph.D., Advisor

Project Title: "Coronary Arteriole Remodeling in Type 2 Diabetes"

2004-2008 **Doctor of Philosophy in Physiology & Pharmacology, December 2008**

Wake Forest University Graduate School of Arts and Sciences

Winston-Salem, North Carolina Carlos M. Ferrario, M.D., Advisor

Dissertation Title: "New Advances on the Biochemical Pathways in the Renin-Angiotensin System in Hypertension and their Role in Cardiac Structure and

Function"

1999-2003 Bachelor of Science in Biology, with Minors in Biochemistry and

Biomedical Sciences, with Distinction, May 2003

Ohio Northern University

Ada. Ohio

ACADEMIC APPOINTMENTS:

2013-Present Principal Investigator, Center for Cardiovascular and Pulmonary Research

The Research Institute at Nationwide Children's Hospital

Assistant Professor (Research Track), Department of Pediatrics

The Ohio State University College of Medicine

Columbus, Ohio

HONORS AND AWARDS:

2012 Research Recognition Award, Cardiovascular Section, American Physiological

Society

2012 Best Poster Award – Postdoctoral Fellow Category, The Research Institute at

Nationwide Children's Hospital Research Day

2010 Caroline tum Suden/Frances A. Hellebrandt Professional Opportunity Award,

| American Physiological Society |
|---|
| American Physiological Society Logo Design Award Winner |
| WFU Department of Physiology & Pharmacology Sundberg Memorial Award |
| Marquis Who's Who Among Executives and Professionals |
| Merck New Investigator Award, American Heart Association Council for High |
| Blood Pressure Research |
| American Heart Association Hypertension Summer School Travel Award |
| Wake Forest University Graduate School Alumni Travel Award |
| Ohio Northern University Arts & Sciences Scholarship |
| Ohio Northern University Dean's List |
| Ohio Northern University Achievement/Leadership Award Scholarship |
| Ohio Northern University Dean's Scholarship |
| Tiffany Furgason Memorial Scholarship |
| Arcanum Alumni Scholarship |
| |

PROFESSIONAL AFFILIATIONS:

| 2011-Present | American Association for the Advancement of Science |
|--------------|---|
| 2009-Present | American Society for Pharmacology and Experimental Therapeutics |
| | Division of Cardiovascular Pharmacology |
| | 2009-2012: Public Relations/Communications Committee |
| 2005-Present | American Heart Association |
| | Council for High Blood Pressure Research |
| | 2009-2013: Trainee Advocacy Committee |
| | 2013-2015: Chair, Trainee Advocacy Committee |
| 2005-Present | American Physiological Society (APS) |
| | Cardiovascular Section |
| | 2009-2012: NIH-NHLBI Liaison Committee |
| | 2012-2015: Awards Committee |
| 2005-Present | Consortium for Southeastern Hypertension Control |
| 2001-Present | Beta Beta Beta National Biology Honor Society |
| 2001-Present | Omicron Delta Kappa National Leadership Honor Society |

PROFESSIONAL DEVELOPMENT:

| 2013 | Experimental Biology Meeting, Boston, Massachusetts |
|------|--|
| 2012 | Experimental Biology Meeting, San Diego, California |
| 2011 | Experimental Biology Meeting, Washington, D.C. |
| 2011 | Keystone Symposium: Extracellular Matrix and Cardiovascular Remodeling, |
| | Tahoe City, California |
| 2010 | 64th American Heart Association Council for High Blood Pressure Research |
| | Annual Meeting, Washington, D.C. |
| 2010 | Experimental Biology Meeting, Anaheim, California |
| 2009 | 63 rd American Heart Association Council for High Blood Pressure Research |
| | Annual Meeting, Chicago, Illinois |
| 2009 | Experimental Biology Meeting, New Orleans, Louisiana |

Aaron J. Trask, Ph.D. Curriculum Vitae

| 2008 | 62 nd American Heart Association Council for High Blood Pressure Research |
|------|--|
| | Annual Meeting, Atlanta, Georgia |
| 2008 | 3rd Annual National Institutes of Health National Graduate Student Research |
| | Festival, Bethesda, Maryland |
| 2007 | Experimental Biology Meeting, San Diego, California |
| 2007 | 61st American Heart Association Council for High Blood Pressure Research |
| | Annual Meeting, Tucson, Arizona |
| 2007 | 6th American Heart Association Hypertension Summer School, Fort Collins, |
| | Colorado |
| 2007 | Inter-American Society of Hypertension / Consortium for Southeast |
| | Hypertension Control Annual Meeting, Miami Beach, Florida |
| 2006 | 60th American Heart Association Council for High Blood Pressure Research |
| | Annual Meeting, San Antonio, Texas |

TEACHING EXPERIENCE:

| 2012- | Course Director/Lecturer, Advanced Cardiac Physiology Module for Cardiology |
|-----------|--|
| | Fellows, The Heart Center at Nationwide Children's Hospital, Columbus, Ohio. |
| 2010-2012 | Course Coordinator/Lecturer, NCH Center for Cardiovascular and Pulmonary |
| | Research Summer Course in Cardiovascular Sciences, Columbus, Ohio. Lectured |
| | on diabetes, metabolic syndrome, and cardiovascular physiology. |
| 2007-2008 | Lecturer, Winston-Salem State University Physical Therapy Program, Winston- |
| | Salem, North Carolina. Lectured on cardiac output, cardiovascular exercise |
| | physiology, hemorrhagic shock, and heart failure. |
| 2006 | Graduate Tutor, Wake Forest University Department of Physiology and |
| | Pharmacology, Winston-Salem, North Carolina |
| 2001-2003 | Student Tutor, Ohio Northern University Interpersonal Communications Skills |
| | Center, Ada, Ohio |

INSTITUTIONAL ORGANIZATIONS/ACTIVITIES:

| 2009-Present | Founding Member, Nationwide Children's Hospital Postdoctoral Association |
|--------------|--|
| 2006 | Student Member, Wake Forest University Department of Physiology and |
| | Pharmacology Curriculum Committee |
| 2004-2008 | Student Member, Wake Forest University Graduate Student Association |
| 2001-2003 | Chairman, Judicial Board, Ohio Northern University |
| 2000-2003 | Chairman, Judicial Committee, Ohio Northern University Student |
| | Senate |

MENTORING:

| 2013 | Kevin Wu, Summer High School Intern, New Albany High School, New Albany, Ohio |
|------|---|
| 2012 | Brian Gablaski, Summer Graduate Student, University of Massachusetts, Lowell, Massachusetts |
| 2012 | Tori Evans, Summer Undergraduate Student, Miami University, Oxford, Ohio |

Aaron J. Trask, Ph.D. Curriculum Vitae

| 2011-Present | Kristin Lewis, Graduate Student/DVM Resident, The Ohio State University, Columbus, Ohio |
|--------------|---|
| 2011-2012 | Karen Tiago dos Santos, Visiting Graduate Student, University of Sao Paulo, Sao |
| 2010-2011 | Paulo, Brazil Maria Delbin, Visiting Postdoctoral Fellow, Sao Paulo State University, Rio Claro, Brazil |
| 2010-Present | John Weibel, Summer H.S./Undergraduate Student, Case Western Reserve University, Cleveland, Ohio |
| 2010-Present | Kathryn Halleck, Graduate Student, The Ohio State University, Columbus, Ohio |
| 2009 | Kayla Kontul, Summer Undergraduate Student, University of the Cumberlands, Williamsburg, Kentucky |
| 2009-2011 | Paige S. Katz, Graduate Student, Louisiana State University, New Orleans, Louisiana |
| 2008 | Juanita Perez, Summer Undergraduate Student, Florida International University, Miami, Florida |
| 2007 | Charles Hall, Summer Undergraduate Student |
| 2005 | Jasdeep Dhaliwal, Summer Undergraduate Student |
| 2005 | Alexis Bailey, Summer Undergraduate Student, High Point University, High |
| | Point, North Carolina |

COMMUNITY SERVICE:

| 2009-2013 | Team Captain, American Heart Association Heart & Stroke Walk, Hunting | |
|-----------|--|--|
| | Park, Columbus, Ohio | |
| 2006-2007 | Team Captain, American Heart Association Heart & Stroke Walk, Tanglewood | |
| | Park, Clemmons, North Carolina | |

EDITORIAL ACTIVITIES:

| Reviewed For: | |
|---------------|---|
| 2013-Present | Pediatric Research |
| 2012-Present | PLoS One |
| 2012-Present | Mechanisms of Ageing and Development |
| 2012-Present | Journal of Cardiovascular Pharmacology |
| 2011 | Pediatrics |
| 2011 | Diabetes |
| 2010-Present | Arteriosclerosis, Thrombosis, and Vascular Biology |
| 2010-Present | Cardiovascular Research |
| 2009-Present | Hypertension |
| 2009-Present | Life Sciences |
| 2006-Present | American Journal of Physiology - Heart and Circulatory Physiology |
| 2009 | American Journal of Physiology - Regulatory Integrative and Comparative |
| | Physiology |
| 2008 | Heart and Vessels |
| 2008 | Neuropharmacology |
| 2008 | Pharmacological Research |
| 2008 | Physiological Genomics |

2008 Regulatory Peptides

2006 Cardiovascular Drug Reviews

2006-Present Circulation Research

GRANT REVIEWS:

| 2012 | Czech Science Foundation |
|------|-----------------------------|
| 2010 | Serbian Ministry of Science |

GRANTS:

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| $\boldsymbol{\Pi}$ | ctive |

7/1/2013- American Heart Association Scientist Development Grant. **Aaron J. Trask, PI.** "Differential Macro- and Micro-Vascular Remodeling in Type 2 Diabetes." Total Award Amount: \$308,000.

Pending:

12/1/2013- NIH/NHLBI K99/R00 Pathway to Independence Award. **Aaron J. Trask, PI.** 11/30/2018 "Differential Macro- and Micro-Vascular Remodeling in Type 2 Diabetes and Metabolic Syndrome." Total Award Amount: \$1, 005,120.

Completed:

| 1/1/2010- | Ruth L. Kirchstein National Research Service Award Postdoctoral |
|-----------|---|
| 6/30/2012 | Fellowship (#T32HL098039-01), National Institutes of Health. Aaron J. |
| | Trask, Sub-Project PI. "AGE/RAGE Associated Coronary Artery Remodeling in |
| | Type 2 Diabetes." Total Award Amount: \$97,790. |

| 7/1/2007- | American Heart Association Mid-Atlantic Affiliate Pre-Doctoral |
|------------|--|
| 12/30/2008 | Fellowship (#0715249U). Aaron J. Trask, PI. "The ACE2/Angiotensin- |
| | (1-7) Axis in Heart Failure." Total Award Amount: \$40,000. |

8/15/2004- Dean's Fellowship, Wake Forest University Graduate School of Arts & Sciences. 6/30/2007

BIBLIOGRAPHY: Dr. Trask has a current <u>H-Index of 9</u>, meaning 9 of his publications have been cited 9 or more times.

BOOK CHAPTERS:

- 1. **Trask AJ**, Varagic J, Ahmad S, Ferrario CM. "Angiotensin-(1-7), Angiotensin Converting Enzyme 2, and New Components of the Renin-Angiotensin System." Renin-Angiotensin System and Cardiovascular Disease. Ed. De Mello W.C. & Frohlich E.D. Totowa: Humana Press, 2009. 121-132. (Corresponding Author)
- 2. **Trask AJ**, Ferrario CM. "The Renin-Angiotensin System and the Heart." <u>Textbook of Nephro-Endocrinology</u>. Ed. Singh A. & Williams G. San Diego: Elsevier, 2009. 181-188.
- 3. Ferrario CM, Jessup JA, **Trask AJ**, Varagic J. "Basic Science in Hypertension." <u>The Year in Hypertension</u>. Ed. Townsend R. Oxford: Clinical Publishing, 2008. 1-17.

IOURNAL ARTICLES:

- 1. *Tiago dos Santos K, ***Trask AJ**, Halleck KE, Katz PS, Galantowicz ML, Lucchesi PA. Mitochondrially-Derived, but not NADPH Oxidase-Derived, Superoxide Promotes Coronary Arteriolar Remodeling in Type 2 Diabetic Mice. In Preparation. **(*Authors contributed equally to this work)**
- 2. Katz PS, Halleck KE, Galantowicz ML, **Trask AJ**, Lucchesi PA. Losartan Reverses Adverse Coronary Arteriolar Remodeling in Type 2 Diabetic Mice. In Preparation.
- 3. **Trask AJ**, Katz PS, Stewart Jr. JA, Lucchesi PA. Receptor for Advanced Glycation End Products Contribute to Type 2 Diabetic Coronary Arteriole Remodeling without Affecting Stiffness. In Preparation. **(Corresponding Author)**
- 4. Delbin MA, **Trask AJ**, Cismowski MJ, Zanesco A, Lucchesi PA. Aerobic Exercise Training Improves Endothelial Dysfunction in Type 2 Diabetic Mice by Advanced Glycation End-Product-Independent Pathway, In Preparation.
- 5. Groban L, Wang H, Machado FSM, **Trask AJ**, Kritchevsky SB, Ferrario CM, Diz DI. Low Glial Angiotensinogen Improves Body Habitus, Diastolic Function, and Exercise Tolerance in Aging Male Rats. *Cardiovasc Endocrinol* 2012; 1:49-58.
- Trask AJ, Delbin MA, Katz PS, Zanesco A, Lucchesi PA. Differential Coronary Resistance Microvessel Remodeling between Type 1 and Type 2 Diabetic Mice: Impact of Exercise Training. Vascul Pharmacol 2012; 57:187-193. PMID: 22885305. (Corresponding Author)
- 7. **Trask AJ**, Katz PS, Kelly AP, Galantowicz ML, Cismowski MJ, West TA, Neeb ZP, Berwick ZC, Goodwill AG, Alloosh M, Tune JD, Sturek M, Lucchesi PA. Dynamic Micro- and Macro-Vascular Remodeling in Coronary Circulation of Obese Ossabaw Pigs with Metabolic Syndrome. *J Applied Physiol* 2012; 113:1128-1140. PMID: 22837170. **(Corresponding Author)**
- 8. Souza-Smith FM, Katz PS, **Trask AJ**, Stewart Jr. JA, Lord KC, Varner KJ, Vassallo DV, Lucchesi PA. Mesenteric Resistance Arteries in Type 2 Diabetic Mice Undergo Outward Remodeling. *PLoS One* 2011; 6:e2337. PMID: 21829729.
- 9. Katz PS, **Trask AJ**, Souza-Smith FM, Hutchinson KR, Lord KC, Stewart Jr. JA, Cismowski MJ, Varner KJ, Lucchesi PA. Coronary Arterioles in Type 2 Diabetic (db/db) Mice Undergo a Distinct Pattern of Remodeling Associated with Decreased Vessel Stiffness. *Basic Res Cardiol* 2011; 106:1123-1134. PMID: 21744279.
- 10. *Egan MJ, ***Trask AJ**, Baker PB, Lawrence J, Ladich E, Virmani R, Lucchesi PA, Hill SL, Galantowicz M, Cheatham JP, Kovalchin JP. Histopathologic Evaluation of Patent Ductus Arteriosus Stents after Hybrid Palliation of Hypoplastic Left Heart Syndrome. *Pediatric Cardiol* 2011; 32: 413-417. PMID: 21298382. **(*Authors contributed equally to this work)**
- 11. **Trask AJ**, Groban L, Westwood BM, Varagic J, Ganten D, Gallagher PE, Chappell MC, Ferrario CM. Inhibition of Angiotensin Converting Enzyme 2 Exacerbates Cardiac Hypertrophy and Fibrosis in Ren-2 Hypertensive Rats. *Am J Hypertens* 2010; 23:687-693. PMID: 20300067. **(Corresponding Author)**
- 12. Katz PS, **Trask AJ**, Lucchesi PA. Curcuminoids: Spicing Up Sympathovagal Tone. *Nutrition* 2009; 25: 879-880. PMID: 19539177.
- 13. Ferrario CM, Varagic J, Habibi J, Nagata S, Kato J, Chappell MC, **Trask AJ**, Kitamura K, Whaley-Connell A, Sowers JR. Differential Regulation of Angiotensin-(1-12) in Plasma and Cardiac

- Tissue in Response to Bilateral Nephrectomy. *Am J Physiol Heart Circ Physiol* 2009; 296: H1184-1192. PMID: 19218503.
- 14. Jessup JA, **Trask AJ**, Chappell MC, Nagata S, Kato J, Kitamura K, Ferrario CM. Localization of the Novel Angiotensin Peptide, Angiotensin-(1-12), in Heart and Kidney of Hypertensive and Normotensive Rats. *Am J Physiol Heart Circ Physiol* 2008; 294: H2614-H2618. PMID: 18408132.
- 15. Varagic J, **Trask AJ**, Jessup JA, Chappell MC, Ferrario CM. New Angiotensins. *J Mol Med* 2008; 86: 663-71. PMID: 18437333.
- 16. **Trask AJ**, Jessup JA, Chappell MC, Ferrario CM. Angiotensin-(1-12) is an Alternate Substrate for Angiotensin Peptide Production in the Heart. *Am J Physiol Heart Circ Physiol* 2008; 294: H2242-H2247. PMID: 18359898. **(Corresponding Author)**
- 17. **Trask AJ**, Ferrario CM. Angiotensin-(1-7): Pharmacology and New Perspectives in Cardiovascular Treatments. *Cardiovascular Drug Reviews* 2007; 25(2): 162-174. PMID: 17614938. **(Corresponding Author)**
- 18. **Trask AJ**, Averill DB, Ganten D, Chappell MC, Ferrario CM. Primary Role of Angiotensin Converting Enzyme 2 in Cardiac Production of Angiotensin-(1-7) in Transgenic Ren-2 Hypertensive Rats. *Am J Physiol Heart Circ Physiol* 2007; 292: H3019-H3024. PMID: 17308000. **(Corresponding Author)**
- 19. Ferrario CM, **Trask AJ**, Jessup JA. Advances in Biochemical and Functional Roles of Angiotensin-Converting Enzyme 2 and Angiotensin-(1–7) in the Regulation of Cardiovascular Function. *Am J Physiol Heart Circ Physiol* 2005; 289: H2281-H2290. PMID: 16055515.

ABSTRACTS:

- 1. **Trask AJ**, Cismowski MJ, Halleck KE, Lucchesi PA. Proteomic Analysis of Aortic and Coronary Resistance Microvessel Tissue in Type 2 Diabetic db/db Mice. *FASEB J* 2013; 27:924.11.
- 2. Halleck KE, Katz PS, Tiago dos Santos K, **Trask AJ**, Lucchesi PA. Angiotensin II and Mitochondrially-Derived Oxidative Stress Play a Role in Coronary Arteriole Remodeling in Type 2 Diabetes. *FASEB J* 2013; 27:1185.6.
- 3. Lewis K, Guggilam A, **Trask AJ**, Cismowski MJ, Lucchesi PA. The Myofilament Ca²⁺ Sensitizer Levosimendan Maintains Systolic Function in Volume Overload Heart Failure in Rats. FASEB J 2013; 27:879.6.
- 4. **Trask AJ**, Katz PS, Kelly AP, Cismowski MJ, Galantowicz ML, Neeb ZP, Alloosh M, Sturek M, Lucchesi PA. Differential Stiffness between Resistance Microvessels and Conduit Arteries in the Coronary Circulation of Ossabaw Swine with Metabolic Syndrome. *FASEB J* 2012; 26:1055.8. **(APS Cardiovascular Section Research Recognition Award)**
- 5. **Trask AJ**, Delbin MA, Katz PS, Zanesco A, Lucchesi PA. Aerobic Exercise Training Partially Reverses Inward Hypertrophic Coronary Arteriole Remodeling in Type 2 Diabetic db/db Mice. *FASEB J* 2012; 26:1138.21.
- 6. **Trask AJ**, Katz PS, Kelly AP, Cismowski MJ, Galantowicz ML, Neeb ZP, Alloosh M, Sturek M, Lucchesi PA. Differential Stiffness between Resistance Microvessels and Conduit Arteries in the Coronary Circulation of Ossabaw Swine with Metabolic Syndrome. Research Day, The Research Institute at Nationwide Children's Hospital, Columbus, Ohio, 2012.

- 7. Delbin MA, **Trask AJ**, Cismowski MJ, Zanesco A, Lucchesi PA. Aerobic Exercise Training Improves Endothelial Dysfunction in Type 2 Diabetic Mice by Advanced Glycation End-Products-Independent Pathway. *Free Radical Biology and Medicine* 2011; 51:S61.
- 8. **Trask AJ**, Katz PS, Stewart Jr JA, Lucchesi PA. Receptor for Advanced Glycation End Products is Involved in Remodeling of Diabetic Coronary Arterioles. *FASEB J* 2011; 25:1025.11.
- 9. West TA, Zhang X, Hutchinson KR, **Trask AJ**, Cismowski MJ, Lucchesi PA. AGE/RAGE Interplay in Fibroblast Mediated Diabetic ECM Remodeling Using 3D Collagen Matrices. Keystone Extracellular Matrix and Cardiovascular Remodeling Symposium, Tahoe City, California, 2011.
- 10. **Trask AJ**, Katz PS, Neeb ZP, Alloosh M, Sturek M, Lucchesi PA. Inward Coronary Artery Microvessel Remodeling in Ossabaw Swine with Metabolic Syndrome. *FASEB J* 2010; 24:789.3. **(Selected for oral presentation)**
- 11. **Trask AJ**, Katz PS, Neeb ZP, Alloosh M, Sturek M, Lucchesi PA. Coronary Artery Microvascular Narrowing Downstream of Stent Implantation. *FASEB J* 2010; 24:789.6.
- 12. Katz PS, **Trask AJ**, Lucchesi PA. Progressive Coronary Artery Remodeling in Diabetic db/db Mice. *FASEB J* 2010; 24:790.9.
- 13. Egan MJ, **Trask AJ**, Baker PB, Lawrence J, Ladich E, Virmani R, Hill SL, Galantowicz M, Cheatham JP, Kovalchin JP. Histopathologic Evaluation of Patent Ductus Arteriosus Stents after Hybrid Palliation of Hypoplastic Left Heart Syndrome. *J Am Col Cardiol* 2010; 55:A43.E417.
- 14. **Trask AJ**, Katz PS, Lucchesi PA. Inward Coronary Artery Remodeling in Established Type II Diabetic Mice. Ohio Physiological Association Annual Meeting, Columbus, Ohio, 2009.
- 15. **Trask AJ**, Katz PS, Lucchesi PA. Inward Coronary Artery Remodeling in Established Type II Diabetic Mice. *Hypertension* 2009; 54(4):e121.
- 16. Nagata S, Kato J, Kitamura K, Varagic J, Chappell MC, **Trask AJ**, Habibi J, Sowers JR, Ferrario CM. Augmented Cardiac Content of Proangiotensin-12, Ang-(1-12), in Nephrectomized Rats. 73rd Annual Scientific Meeting of the Japanese Circulation Society. (Selected for oral presentation).
- 17. **Trask AJ**, Groban L, Varagic J, Ferrario CM. Inhibition of Angiotensin Converting Enzyme 2 Aggravates Cardiac Hypertrophy in Ren-2 Hypertensive Rats. 16th Annual Wake Forest University Surgical Sciences Research Day, 2008.
- 18. **Trask AJ**, Groban L, Varagic J, Ferrario CM. Inhibition of Angiotensin Converting Enzyme 2 Aggravates Cardiac Hypertrophy in Ren-2 Hypertensive Rats. *Hypertension* 2008; 52(4):e126.
- 19. Ferrario CM, Varagic J, Chappell MC, **Trask AJ**, Nagata S, Kato J. Bilateral Nephrectomy Augments the Cardiac Content of Angiotensin-(1-12) and Angiotensin I in Wistar-Kyoto Rats. *Hypertension* 2008; 52(4): e126.
- 20. **Trask AJ**, Jessup JA, Tallant EA, Chappell MC, Ferrario CM. Renin-Independent Processing of Angiotensin-(1-12) in the Rat Heart and Isolated Myocytes. *Hypertension* 2008; 52(4):e45-e46 (Selected for oral presentation and Merck New Investigator Award).
- 21. **Trask AJ**, Jessup JA, Tallant EA, Chappell MC, Ferrario CM. Renin-Independent Processing of Angiotensin-(1-12) in the Rat Heart and Isolated Myocytes. Third Annual NIH National Graduate Student Research Festival, Bethesda, Maryland, 2008. **(Selected for presentation)**

- 22. Jessup JA, Habibi J, **Trask AJ**, Chappell MC, Nagata S, Kato J, Kitamura K, Sowers J, Ferrario CM. Experimental Hypertension is Associated with Differential Expression of Angiotensin-(1-12) in Heart of Hypertensive and Normotensive Rats. *FASEB J* 2008; 22:1210.20.
- 23. **Trask AJ**, Jessup JA, Ferrario CM. Angiotensin-(1-12) is a Precursor for the Processing of Cardiac Tissue Angiotensin Peptides. 8th Annual Wake Forest University Graduate Student Research Day, 2008.
- 24. **Trask AJ**, Jessup JA, Ferrario CM. Angiotensin-(1-12) is a Precursor for the Processing of Cardiac Tissue Angiotensin Peptides. 15th Annual Wake Forest University Surgical Sciences Research Day, 2007.
- 25. **Trask AJ**, Jessup JA, Ferrario CM. Angiotensin-(1-12) is a Precursor for the Processing of Cardiac Tissue Angiotensin Peptides. *Hypertension* 2007; 50(4): e154.
- 26. **Trask AJ**, Chappell MC, Ferrario CM. Major Role for Angiotensin Converting Enzyme 2 in Cardiac Angiotensin-(1-7) Production in the Congenic Hypertensive mRen2.Lewis Rat. *Hypertension* 2007; 50(4): e140.
- 27. **Trask AJ**, Averill DB, Chappell MC, Ferrario CM. Predominance of Angiotensin Converting Enzyme 2 to Cardiac Angiotensin-(1-7) Production in [mRen2]27 Transgenic Hypertensive Rats. Inter-American Society of Hypertension/COSEHC Annual Scientific Meeting, Miami Beach, Florida, 2007.
- 28. **Trask AJ**, Averill DB, Chappell MC, Ferrario CM. Predominance of Angiotensin Converting Enzyme 2 to Cardiac Angiotensin-(1-7) Production in [mRen2]27 Transgenic Hypertensive Rats. *Hypertension* 2006; 48(4): e72.
- 29. **Trask AJ**, Averill DB, Chappell MC, Ferrario CM. Cardiac Production of Angiotensin-(1-7) by Angiotensin Converting Enzyme 2. 13th Annual Wake Forest University Surgical Sciences Research Day, 2005.

INVITED LECTURES/ORAL PRESENTATIONS:

- 1. "Coronary Arteriole Remodeling in Type 2 Diabetes and Metabolic Syndrome." Hypertension & Vascular Research Center, Wake Forest University, 2012.
- 2. "Coronary Arteriole Remodeling in Type 2 Diabetes." Experimental Biology, San Diego, California, 2012. (APS Featured Topic Symposium)
- 3. "Mechanisms of Coronary Arteriole Remodeling in Type 2 Diabetes and Metabolic Syndrome." Department of Physical Education, Sao Paulo State University, Rio Claro, Brazil, 2011.
- 4. "New Advances on the Biochemical Pathways in the Renin-Angiotensin System and their Role in Cardiac Structure and Function." Department of Physical Education, Sao Paulo State University, Rio Claro, Brazil, 2011.
- 5. "Mechanisms of Coronary Arteriole Remodeling in Type 2 Diabetes and Metabolic Syndrome." Clinical and Translational Seminar Series, Center for Cardiovascular and Pulmonary Research, The Research Institute at Nationwide Children's Hospital, Columbus, Ohio, 2011.
- 6. "The PhD Journey: Lessons Learned from Graduate School and Beyond." Ohio Northern University Department of Biological and Allied Health Sciences, Ada, Ohio, 2011.

- 7. "A Critical Conduit: Clinical and Physiological Implications of Ductus Arteriosus Restenosis." Bench-to-Outcomes Seminar Series, Nationwide Children's Hospital, Columbus, Ohio, 2010.
- 8. "Inward Coronary Artery Microvessel Remodeling in Ossabaw Swine with Metabolic Syndrome." Experimental Biology, Anaheim, California, 2010. (APS Featured Topic Symposium)
- 9. "The PhD Journey: Lessons Learned from Graduate School and Beyond." Ohio Northern University Department of Biological and Allied Health Sciences, Ada, Ohio, 2010.
- 10. "New Advances on the Biochemical Pathways in the Renin-Angiotensin System and their Role in Cardiac Structure and Function." Nationwide Children's Hospital, Columbus, Ohio, 2008.
- 11. "Renin-Independent Processing of Angiotensin-(1-12) in the Rat Heart and Isolated Myocytes." 62nd American Heart Association Council for High Blood Pressure Research, Atlanta, Georgia, 2008.
- 12. "New Advances on the Biochemical Pathways of the Cardiac Renin-Angiotensin System." Wake Forest University Department of Physiology and Pharmacology, Winston-Salem, North Carolina, 2007.
- 13. "The Cardioprotective Effects of the ACE2/Ang-(1-7) Axis in Heart Failure." Wake Forest University Department of Physiology and Pharmacology, Winston-Salem, North Carolina, 2006.

POSTER PRESENTATIONS:

- 1. "Proteomic Analysis of Aortic and Coronary Resistance Microvessel Tissue in Type 2 Diabetic db/db Mice." Experimental Biology, Boston, Massachusetts, 2013.
- 2. "Aerobic Exercise Training Partially Reverses Inward Hypertrophic Coronary Arteriole Remodeling in Type 2 Diabetic db/db Mice." Experimental Biology, San Diego, California, 2012.
- 3. "Differential Stiffness between Resistance Microvessels and Conduit Arteries in the Coronary Circulation of Ossabaw Swine with Metabolic Syndrome." Experimental Biology, San Diego, California, 2012.
- 4. "Differential Stiffness between Resistance Microvessels and Conduit Arteries in the Coronary Circulation of Ossabaw Swine with Metabolic Syndrome." Research Day, The Research Institute at Nationwide Children's Hospital, Columbus, Ohio, 2012. (Best Poster Award)
- 5. "Receptor for advanced glycation end products is involved in remodeling of diabetic coronary arterioles." Experimental Biology, Washington, D.C., 2011.
- 6. "Inward Coronary Artery Microvessel Remodeling in Ossabaw Swine with Metabolic Syndrome." Experimental Biology, Anaheim, California, 2010.
- 7. "Coronary Artery Microvascular Narrowing Downstream of Stent Implantation." Experimental Biology, Anaheim, California, 2010.
- 3. "Inward Coronary Artery Remodeling in Established Type II Diabetic Mice." Ohio Physiological Society Annual Meeting, Columbus, Ohio, 2009.
- 4. "Inward Coronary Artery Remodeling in Established Type II Diabetic Mice." 63rd American Heart Association Council for High Blood Pressure Annual Meeting, Chicago, Illinois, 2009.

- 5. "Inhibition of Angiotensin Converting Enzyme 2 Aggravates Cardiac Hypertrophy in Ren-2 Hypertensive Rats." 16th Annual Wake Forest University Surgical Sciences Day, Winston-Salem, North Carolina, 2008.
- 6. "Inhibition of Angiotensin Converting Enzyme 2 Aggravates Cardiac Hypertrophy in Ren-2 Hypertensive Rats." 62nd Council for High Blood Pressure Research, Atlanta, Georgia, 2008.
- 7. "Angiotensin-(1-12) is a Precursor for the Processing of Cardiac Tissue Angiotensin Peptides." 8th Annual Wake Forest University Graduate Student Research Day, 2008.
- 8. "Angiotensin-(1-12) is a Precursor for the Processing of Cardiac Tissue Angiotensin Peptides." 15th Annual Wake Forest University Surgical Sciences Day, Winston-Salem, North Carolina, 2007.
- 9. "Angiotensin-(1-12) is a Precursor for the Processing of Cardiac Tissue Angiotensin Peptides." 61st American Heart Association Council for High Blood Pressure Research, Tucson, Arizona, 2007.
- 10. "Major Role for Angiotensin Converting Enzyme 2 in Cardiac Angiotensin-(1-7) Production in the Congenic Hypertensive mRen2.Lewis Rat." 61st American Heart Association Council for High Blood Pressure Research, Tucson, Arizona, 2007.
- 11. "Predominance of Angiotensin Converting Enzyme 2 to Cardiac Angiotensin-(1-7) Production in [mRen2]27 Transgenic Hypertensive Rats." Inter-American Society of Hypertension/COSEHC Annual Scientific Meeting, Miami Beach, Florida, 2007.
- 12. "Predominance of Angiotensin Converting Enzyme 2 to Cardiac Angiotensin-(1-7) Production in [mRen2]27 Transgenic Hypertensive Rats." 60th American Heart Association Council for High Blood Pressure Research, San Antonio, Texas, 2006.
- 13. "Cardiac Production of Angiotensin-(1-7) by Angiotensin Converting Enzyme 2." 13th Annual Wake Forest University Surgical Sciences Day, Winston-Salem, North Carolina, 2005.