Amanda Jo LeBlanc, Ph.D.

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EDUCATION

1999-2002	B.S. in Kinesiology (with distinction), Indiana University, Bloomington, IN
2002-2004	M.S. in Exercise Physiology, University of Louisville, Louisville, KY
2004-2008	Ph.D. in Exercise Physiology, West Virginia University, Morgantown, WV
2008-2009	Postdoctoral Fellow, Center for Cardiovascular and Respiratory Research, West Virginia
	University, Morgantown, WV
2009-2011	Postdoctoral Associate, Cardiovascular Innovation Institute, Jewish Hospital and
	University of Louisville, Louisville, KY

ACADEMIC APPOINTMENTS

2012-2014	Assistant Professor, Department of Obstetrics, Gynecology and Women's Health (Tenure-Track), Cardiovascular Innovation Institute, University of Louisville, Louisville, KY
2014-present	Assistant Professor in Department of Physiology (Tenure-Track), University of
	Louisville, Louisville, KY
2014-present	Associate appointment in Department of Biochemistry and Molecular Genetics,
	University of Louisville, Louisville, KY
2016-present	Associate appointment in Department of Obstetrics, Gynecology and Women's Health,
_	University of Louisville, Louisville, KY

OTHER POSITIONS AND EMPLOYMENT

1999-2002: Laboratory Technician, George Pfau Sons Co., Jeffersonville, Indiana

PROFESSIONAL MEMBERSHIP AND ACTIVITIES

2005-present	The Microcirculatory Society Professional Member
2008-present	American Heart Association Professional Member
2009-2011	Society of Toxicology
2010-present	International Federation for Adipose Therapeutics and Science Professional Member
2013-present	International Society for Heart Research Professional Member
2016-present	American Physiological Society
2013-2016	Membership Committee of The Microcirculatory Society

Editorial Boards

2011-present Review Editor for Frontiers in Vascular Physiology

2015-present Editorial Board for Microcirculation

Manuscript Peer Review

Ad hoc Reviewer: Aging, Aging Cell, AJP- Heart and Circulatory Physiology, AJP - Lung Cellular and Molecular Physiology, BMC Physiology, Cardiovascular Pathology, Cardiovascular Translational Research, Environmental Health Perspectives, Experimental Gerontology, Frontiers in Vascular Physiology, Inhalation Toxicology, Journal of Gerontology: Biological Sciences, Journal of Visual Experiments, Microcirculation, Plos One, Stem Cell Research and Therapy, Stem Cell Translational Medicine, Toxicological Sciences, Toxicology and Applied Pharmacology

2015 National Recognition as a content expert on AJP- Heart and Circulatory Physiology podcast for "Cardiomyocyte specific Bmal1 deletion in mice triggers diastolic dysfunction, extracellular matrix response and impaired resolution of inflammation"

Conference Organization/Leadership

2011	Moderator; Session on "Cell Isolation, Culture, and Storage" - International Federation
	for Adipose Therapeutics and Science Meeting in Miami Beach, FL, October 2011
2016	Moderator; Session on "Proteomics/Biomarkers/Interactomes" – FASEB Conference on
	Matricellular Proteins in Development, Health and Disease, West Palm Beach, FL, July
	2016
2017	Conference Organizing Committee – "Cardiovascular Aging, New Frontiers and Old
	Friends" Westminster, CO, August 11-14, 2017

Community Outreach

Oct 2011	Louisville Science Center Invited Speaker; "Regenerative Medicine" - Grades 6-12 and
	teachers from Kentucky High Schools
April 2012	American Heart Association Invited Speaker for the Go Red For Women Campaign
April 2012	Junior Achievement of Kentucky, Presenter and Session Leader for "Women and
	Cardiovascular Disease" – 11 th Graders from Shawnee High School
Oct 2012	American Heart Association Invited Speaker for Circle of Red/Red Tie Society
Jan 2013	Junior League of Louisville meeting Invited Speaker- "Cardiovascular Disease in Aging
	Women"
April 2013	Junior Achievement of Kentucky, Presenter and Session Leader for "Cardiovascular
	Disease in Men and Women" – 11 th and 12 th Graders from Moore Traditional High
	School
June 2013	United Parcel Service (UPS) Women's Leadership Development- "Lean In" Session
	Invited Speaker
Feb 2014	Oldham County High School Career Fair – STEM field invited speaker
Feb 2015	American Heart Association Invited Speaker for Circle of Red/Red Tie Society event
	"Flirt with Fashion"

July 2016 Gear Up Summer Academy Career Symposium Speaker – rising HS juniors from state of Kentucky

HONORS AND AWARDS

2007	Zweifach Student Travel Award for the 8 th World Congress for Microcirculation
2007	3 rd Place Oral Presentation, E.J. Van Liere Convocation, West Virginia University
2007	1st Place Poster Presentation, Basic Sciences III Division, E.J. Van Liere Research Day, West
	Virginia University
2007	American Physiological Society CV Section Research Recognition Award
2009	1 st Place Poster Presentation, Postdoctoral Fellow Division, E.J. Van Liere Research Day,
	West Virginia University
2010	Postdoctoral Travel Award for the 9 th World Congress for Microcirculation, Paris, France
2012	University of Louisville Faculty Excellence Award for contribution in patents, licenses, and
	options
2012	20 th Annual NIA Summer Training Course in Experimental Aging Research, Buck Institute
	for Research on Aging, Novato, CA
	*One of only 20 Early-Stage Investigator/Junior Faculty selected in the nation to
	<u>participate</u>
2014	University of Louisville Faculty Excellence Award for contribution in patents, licenses, and
	options
2016	Travel Grant from the European Society of Cardiology Council on Basic Cardiovascular
	Sciences, Florence, Italy

COMMITTEE ASSIGNMENTS AND ADMINISTRATIVE SERVICES

Grant Review

2013-present	American Heart Association National Peer Review Committee – Vascular Endothelial
	Biology 2
2016-present	Early Career Reviewer for the Center for Scientific Review (CSR), National Institutes of
	Health

University Service

2010-present	Research Louisville Poster presentation judge
2013-present	Institutional Animal Care and Use Committee
2013-2014	Director, Resident Research for the Department of Obstetrics, Gynecology and Women's
	Health
2013-2014	Director, Research Day for the Department of Obstetrics, Gynecology and Women's
	Health

EDUCATIONAL ACTIVITIES

Teaching Activities for Students

2000-2002:	Undergraduate Teaching Assistant, Indiana University, Bloomington, Indiana
2001-2002:	Undergraduate Research Assistant, Indiana University, Bloomington, Indiana
2004-2005:	Graduate Teaching Assistant, Texas A&M University, College Station, Texas
Fall 2005	Course organizer/lecturer. Running, 1 credit; 120 undergraduate students
Spring 2005	Course organizer/lecturer. Running, 1 credit; 60 undergraduate students
Spring 2005	Course organizer/lecturer. Health and Fitness, 2 credits; 120 undergraduate students
Spring 2009	Lecturer. EXPH 365: Exercise Physiology I, 3 credits; 80 undergraduate students

Teaching Activities for Professionals

Fall 2008	Lecturer. Fundamentals of Physiology, 3 credits; 100 professional students
Spring 2009	Lecturer. EXPH 567: Exercise Physiology II, 4 credits; 15 professional students
Spring 2015	Lecturer, PHZB 609: Integrated Systemic Physiology, session of "Exercise and Neural
	Control of the Heart and Lungs", 6 professional students

Mentored students (date degree awarded, degree program, research area, current position)

Supervision of Doctoral Students

2013-2015	Christopher Nevitt - Ph.D. current, Biochemistry and Molecular Biology, University
	of Louisville

Clinical Residents and Fellows, Medical Students

2011-2013	Quang Tung Nguyen, M.D Visiting Research Scholar (2Y Resident in Internal
	Medicine, St. Francis Hospital, Evanston, IL)
2013-2015	Robert Hunter, M.D. –Fellow in Reproductive Endocrinology and Infertility
	Division
2015	Jeff Austin – 2Y Medical Student at University of Louisville

<u>Undergraduate Research</u>

2014-2015	Grant McKenzie – Undergraduate in Biology, University of Louisville
2014-2016	Katelyn Christian – Undergraduate in Biology current, Georgetown College,
	Howard Hughes Medical Institute scholarship recipient
2015	Sarah Hencke – Undergraduate student in Biology, Georgetown College, Howard
	Hughes Medical Institute scholarship recipient
2016-present	Charles Shofner - Undergraduate in Biology, University of Louisville

Service on Dissertation/Thesis Committee

2014-present	Kathryn Deveau – Ph.D. current, Anatomical Sciences and Neurobiology, University
	of Louisville
2015-present	Joe Zakhai – M.D./Ph.D. current, Physiology, University of Louisville
2016-present	Logan Curtis Whitchurch – Ph.D. current, Physiology, University of Louisville

GRANTS AND CONTRACTS

Active Support

- 1. NIH R01 "Reversing microvascular dysfunction in advancing age". Impact score: 18, 4th percentile, expected start date of April 2017 (LeBlanc PI)
- 2. Helmsley Restorative Medicine Center: Spinal Cord Injury and Cardiovascular Function (LeBlanc, co-PI) Jan 1, 2016 June 30, 2017
- 3. Jewish Heritage Foundation for Excellence "Microvascular Dysfunction in Women's Hearts: A Novel Diagnosis and Treatment Regime" (LeBlanc, PI), \$350,000, July 1, 2016-June 30, 2018

Pending Support

1. NIH RO1- Targeting coronary microvascular dysfunction through cell therapy" – Submitted in October 2016

Past Support

1. Kosair Charities Pediatric Heart Research Pilot Grant (LeBlanc, PI) S 50,000

"Age-related differences in SVF-assisted coronary microvascular repair"
This study will determine the greatest source potential for creating a stromal vascular fraction construct and its ability to support microvascular repair in areas of coronary ischemia in the adolescent heart.

2. AHA Beginning Grant-in-Aid (LeBlanc, PI)

Jan. 1, 2012 – June 30, 2014 \$ 132,000

"Improving coronary microcirculation in advanced age through cell-based therapy"
This purpose of this grant is to promote the first independent step of a junior scientist. The primary goal of this study is to develop a cell-based therapy using age-specific adiposederived stem cells to treat coronary microvascular dysfunction in a model of advanced age.

- 3. University of Louisville Intramural Research Incentive Grant Jan 2013- Dec 2013 (LeBlanc, PI) \$3,798
 "Regenerative potential of adipose-derived stem cells during advancing age in women"
- 4. Undergraduate Research Grant (awarded to Grant McKenzie, Univ. of Louisville) Oct. 2014 Oct. 2015, "Aging Effects of Thrombospondin-1 in the Coronary Arterioles"
- 5. NIH R21 AG047474-01

Sept. 1, 2014 – June 30, 2015

"Dopamine-mediated regulation of blood pressure in aging: Role of NHERF-1" (LeBlanc, co-PI, 15% effort).

PATENTS AND DISCLOSURES

Non-provisional Patent Applications

- 2011 "Adipose Stromal Vascular Cell Constructs" # 437783-079. There is also a foreign file related to this application #437783-0093.
- 2011 # ULRF 11088 "Adipose Stromal Vascular Fraction Cell Epicardial Patch" patent pending, license option to Tissue Genesis Inc., #437783-0077
- 2014 "Methods for Treating an Established Myocardial Infarction" patent pending, license option to Tissue Genesis Inc. #437783-0102

ABSTRACTS AND PRESENTATIONS

Oral Presentations at National/International Meetings

Selected Abstracts Oral Presentations

- 1. A Special Transatlantic Meeting of The Microcirculatory Society, Inc. and The British Microcirculation Society, Durham, NH, "Age-induced impairment of nitric oxide-dependent vasodilation in coronary arterioles: Role of phosphotidylinositol 3-kinase signaling." Sep 2005 Abstracts of Microcirculation 2005: A Transatlantic Microcirculation Conference. Microcirculation, 12: 645–689
- 2. FASEB, Featured Topic Session on Control of Coronary Blood Flow, Washington D.C., "Beyond Venus and Mars: The effect of gender and age on endothelial dysfunction in coronary arterioles." April 2007, FASEB J. 2007 21:900.4
- 3. Society of Toxicology Annual Meeting, Baltimore, MD "Calcium-dependent vasodilation is impaired in coronary arterioles after nanoparticle inhalation." Mar 2009. Toxicological Sciences, March 108 (1-S), 1350, 2009.
- 4. International Federation of Adipose Therapeutics and Science Annual Meeting, Dallas TX, "Adipose-derived Stromal Vascular Fraction Patch Improves Coronary Blood Flow after Myocardial Infarct" Oct 2010
- 5. International Federation of Adipose Therapeutics and Science Annual Meeting, Miami Beach, FL, "Adipose Stromal Vascular Fraction cells preserve coronary perfusion when used immediately after ischemia" Oct 2011
- 6. Joint Meeting of the British Microcirculation Society and The Microcirculatory Society, University of Oxford, UK, "Delayed Treatment of MI with Adipose-Derived Regenerative Cells Halts Deteriorating LV Function and is Associated with Increased Capillary Perfusion" July 2012
- 7. North American Vascular Biology Organization meeting featuring the Microcirculation Society, Monterey, CA, "Microvascular network maturation but not vasculogenesis is decreased in adipose-derived stromal vascular fraction with advanced donor age" October 2014
- 8. American Heart Association Scientific Sessions, Chicago IL, "Adipose-derived cell treatment improves coronary blood flow reserve in aged females and is associated with altered ROS production in coronary arterioles" November 2014

9. Frontiers in Cardiovascular Biology, Florence Italy, "Circulating thrombospondin-1 inhibits coronary blood flow reserve in aging hearts through a CD-47-dependent decrease in NO in coronary arterioles", July 2016

Invited Seminars

- 1. WVU School of Medicine, E.J. Van Liere Convocation "Beyond Venus and Mars: The effect of gender and age on endothelial dysfunction in coronary arterioles." April 2007
- 2. University of New Mexico and Lovelace Respiratory Research Institute "Nanoparticle Inhalation Impairs Endothelium-Dependent Vasoreactivity in Coronary Arterioles." Oct 2008
- 3. Indiana University Department of Cellular and Integrative Physiology, "Aging and Gender effects on the Vasoreactivity of Coronary Arterioles." Mar 2009
- 4. West Virginia University Department of Physiology and Pharmacology Seminar Series, "Using a novel 3D microcirculation support construct to treat myocardial infarction." Oct 2012
- 5. Texas A&M Health Sciences Center, Medical Physiology Seminar Series, Temple, Texas "CVD in women and the implications for a microcirculation support therapy." March 2013
- 6. 10th World Congress for Microcirculation, Kyoto, Japan, "Microvascular Plasticity in Health and Disease" September 2015
- 7. Keynote Speaker for American Society for Extracorporeal Technology, San Antonio TX, "The Microcirculation: From the Research Bench to the Operating Room" October 2015
- 8. Keynote Speaker for American Society for Extracorporeal Technology, San Antonio TX, "Myocardial Protection: The Science and Pathophysiology of Myocardial Ischemic Injury", October 2015
- 9. FASEB Matricellular Proteins in Development, Health, and Disease, West Palm Beach FL, "Physiological Levels of Thrombospondin-1 Decrease NO-Dependent Vasodilation in Coronary Microvessels from Aged Rats", July 2016
- 10. East Tennessee State University, Biological Sciences/ Health Sciences Seminar Series, Johnson City, TN "Myocardial regeneration in aging: a plumbing-first approach", September 2016
- 11. University of Mississippi Medical Center, Department of Physiology & Biophysics Seminar Series, Jackson, MS "Myocardial regeneration in aging: a plumbing-first approach", November 2016
- 12. Medical College of Wisconsin, Cardiovascular Center Seminar Series, Milwaukee WI, "Myocardial regeneration in aging: a plumbing-first approach", November 2016
- 13. APS Specialty Meeting "Cardiovascular Aging, New Frontiers and Old Friends" Westminster, CO, August 11-14, 2017

<u>Invited Oral Presentations at Local/Regional Meetings</u>

- 1. University of Louisville Department of Obstetrics, Gynecology and Women's Health, "Cardiovascular Disease and the Role of Microvessels in Aging Women." January 2013
- 2. University of Louisville Department of Physiology and Biophysics Seminar Series, "CVD and the implications for a microcirculation support therapy." March 2013
- 3. University of Louisville Department of Anatomical Sciences and Neurobiology, "Restoration of Coronary Microvascular Function by Adipose-derived Cellular Therapy." September 2013

- 4. University of Louisville Department of Medicine, Division of Nephrology and Hypertension Research Group, "*Restoration of Coronary Microvascular Function by Adipose-derived Cellular Therapy*." October 2013
- 5. District 5 American Association for Laboratory Animal Science, Lexington KY, "Epicardial Cell Therapy for Heart Disease in Rats: the Science, Surgery, and Related Animal Care." May 2014

Poster Abstracts

- 1. **LeBlanc AJ,** Shipley RD, and Muller-Delp JM. Experimental Biology, San Franscisco, CA. Effect of aging on nitric oxide signaling in coronary arterioles: Role of phosphoinositol 3-kinase. *FASEB J* 20: A1397, 2006.
- 2. **LeBlanc AJ**, Nichol KE, Woodman CR, Shipley RD, Prisby RD, and Muller-Delp JM. Experimental Biology, San Franscisco, CA, NOS expression and activity in cerebral resistance arteries: Effects of aging and exercise training. *FASEB J* 20: A813, 2006.
- **3. LeBlanc AJ,** Behnke BJ, Wu G, Muller-Delp JM, DelpMD. Integrative Physiology of Exercise, Indianapolis, IN. Aging Decreases NOS Regulatory Mechanisms in Skeletal Muscle Resistance Arteries. *Med Sci Sports Exercise* 38(11) Suppl 1:S3, 2006.
- 4. Reyes RA, Nichol KE, Spier SA, **LeBlanc AJ**, Muller-Delp, JM. Integrative Physiology of Exercise, Indianapolis, IN. Effects of Age and Exercise Training on Nitric Oxide Bioavailability in Cerebral Resistance Arteries. *Med Sci Sports Exercise* 38(11) Suppl 1:S4, 2006.
- 5. AJ LeBlanc, R Reyes, JM Muller-Delp. 8th World Congress for Microcirculation, Milwaukee, WI. At the heart of the matter: Gender- and age-related alterations in NO-mediated endothelium-dependent vasodilation in coronary arterioles *Microcirculation* 2007; 14:526-527.
- 6. LS Kang, **AJ LeBlanc**, PJ Dougherty, R Shipley, and JM Muller-Delp; Experimental Biology, Washington D.C., Aging and gender alter thromboxane-induced vasoconstriction and thromboxane receptor expression in coronary microvasculature *FASEB J.* 2007 21:740.11
- 7. C McCroskey, RA Reyes, **AJ LeBlanc**, and J Muller-Delp; Experimental Biology, Washington D.C., Endothelial-dependent and –independent vasodilation in cerebral resistance arteries: Effects of age and estrogen Status *FASEB J.* 2007 21:904.9
- 8. RA Reyes, **AJ LeBlanc**, and J Muller-Delp; Experimental Biology, Washington D.C., Thromboxane induced-vasoconstriction in coronary resistance arteries: Effects of age and ovarian hormone status *FASEB J.* 2007 21:740.12
- 9. **LeBlanc, A.J.,** Y Hu, J Muller-Delp, B.T. Chen, D. Frazer, V. Castranova and TR Nurkiewicz. American Heart Association Combined Sessions, New Orleans, LA. Nanoparticle inhalation impairs endothelium-dependent vasoreactivity in coronary arterioles. *Circulation* 2008; 118:S_562, #5500.
- 10. **AJ LeBlanc,** Y Hu, J Muller-Delp, B.T. Chen, D. Frazer, V. Castranova and TR Nurkiewicz. 25th Conference of the European Society for Microcirculation, Budapest, Hungary, August 2008. Particulate matter inhalation impairs coronary microvascular reactivity. J Vasc Res 2008;45(suppl 2):156
- 11. **AJ LeBlanc**, R Reyes, and JM Muller-Delp; Experimental Biology, San Diego, CA. Advancing age and loss of ovarian hormones impair flow-induced dilation in the female coronary microvasculature *FASEB J.* 2008 22:1142.7

- 12. **LeBlanc, A.J.**, Touroo J, Hoying J, Williams S. 9th World Congress of Microcirculation, Paris, France, October 2010. Tissue-engineered cardiac patch stimulates angiogenesis and improves coronary function after myocardial infarct. Microcirculation 2010
- 13. Aird AL, Nguyen QT, **LeBlanc AJ**. ISHR XXI World Congress, July 2013. Regenerative potential of coronary blood flow reserve function by adipose-derived stromal vascular cells is dependent upon age of donor cells.
- 14. Aird AL, Nguyen QT, **LeBlanc AJ**. The Cardiovascular Forum for Promoting Centers of Excellence and Young Investigators, August 2013. Regenerative potential of coronary blood flow reserve function by adipose-derived stromal vascular cells is dependent upon age of donor cells.
- 15. Murray R, **LeBlanc AJ**, Lederer ED, Khundmiri SJ. American Society of Nephrology, November 2013. NHERF-1 expression in aging kidney tubular apical and basolateral membranes.
- 16. **LeBlanc AJ**, Aird AL, Nguyen QT, Nevitt CD. Adipose-derived cell treatment is associated with decreased ROS production and improved coronary microvascular function in advanced age. *The FASEB Journal*, vol. 28 no.1 supplement, 676.11, April 2014.
- 17. C. Kilar, R. Reyes, L. Kang, **A. LeBlanc**, C. McCroskey, R. Bryan and J. Muller-Delp. Endothelium-dependent vasodilation in cerebral resistance arteries: effects of age and estrogen status. The FASEB Journal, vol. 28 no.1 supplement, 680.8, April 2014
- 18. Nevitt CD, McKenzie GW, Christian KT, **LeBlanc AJ**. Thrombospondin-1 decreases NO-mediated vasodilation in coronary arterioles in advanced age. Gordon Conference "Biology of Aging", July 2015

PUBLICATIONS

Articles Published in Peer Reviewed Journals (Original Research Articles):

- 1. **LeBlanc AJ**, Shipley RD, Muller-Delp JM. Aging Impairs Flk-1 Signaling and NO-Mediated Vasodilation in Coronary Arterioles. *Am J Physiol Heart Circ Physiol* 295: H2280–H2288, 2008.
- 2. **LeBlanc, AJ**, Reyes R, Kang LS, Dailey RA, Stallone JN, Muller-Delp JM. Estrogen replacement improves while aging and loss of ovarian hormones impair flow-induced vasodilation in coronary arterioles. *AJP-Regulatory- Integrative and Comparative Physiology* Dec;297(6):R1713-23, 2009
- 3. **LeBlanc AJ**, JL Cumpston, BT Chen, D Frazer, V Castranova, TR Nurkiewicz. Nanoparticle inhalation impairs endothelium-dependent vasodilation in subepicardial arterioles. *J Toxicology and Environmental Health Part A*, 72(24):1576-84, 2009.
- 4. **LeBlanc AJ**, AM Moseley, BT Chen, D Frazer, V Castranova and TR Nurkiewicz. Nanoparticle inhalation impairs coronary microvascular reactivity via a local reactive oxygen species-dependent mechanism. *Cardiovascular Toxicology*, 10(1):27-36, 2010
- 5. Kang L, Chen B, Reyes R, **LeBlanc A**, Teng B, Mustafa S, Muller-Delp J. Aging and estrogen alter endothelial reactivity to reactive oxygen species in coronary arterioles. *Am J Physiol Heart Circ Physiol*, 300: H2105-15, 2011
- 6. Sasser JM, Akinsiku O, Moningka NC, Jerzewski K, **LeBlanc AJ**, Kang LS, Sindler AL, Muller-Delp JM, Baylis C. Sexual dimorphism in development of kidney damage in the aging Fischer-344 (F344) rat. *Gender Medicine*, 9(4): 219-231, 2012.

- 7. **LeBlanc AJ**, Hoying JB, Touroo J, Williams SK. Adipose stromal vascular fraction construct protects coronary microvascular function after acute myocardial infarction. *Am J Physiol Heart Circ Physiol* 302: H973-82, 2012.
- 8. *LeBlanc AJ, Nguyen QT, Touroo JS, Aird AL, Chang RC, Ng CK, Hoying JB, Williams SK. Adipose-derived cell construct stabilizes heart function and increases microvascular perfusion in an established infarct. *Stem Cells Translational Research*, 2(11): 896-905, 2013, *Corresponding author
- 9. **LeBlanc AJ**, Chen B, Dougherty PJ, Reyes RA, Shipley RD, Korzick DH, Muller-Delp JM. Divergent effects of aging and sex on vasoconstriction to endothelin in coronary arterioles. *Microcirculation*, Jul;20(5):365-76, 2013.
- 10. Hunter RK II, Nevitt CD, Gaskins JT, Keller BB, Bohler HCL Jr, **LeBlanc AJ** Adipose-Derived Stromal Vascular Fraction Cell Effects on a Rodent Model of Thin Endometrium. PLoS ONE 10(12): e0144823. doi:10.1371/journal.pone.0144823, 2015
- 11. Aird AL, Nevitt CD, Christian K, Williams SK, Hoying JB, **LeBlanc AJ**. Adipose derived stromal vascular fraction cells isolated from old animals exhibit reduced capacity to support the formation of microvascular networks. *Experimental Gerontology*, 63: 18-26, 2015.
- 12. Morris ME, Beare JE, Reed RM, Dale JR, **LeBlanc AJ**, Kaufman CL, Zheng, H, Ng C, Williams SK, and Hoying JB. CD11b-positive cells within the adipose stromal vascular fraction improves small artery function by reducing myogenic tone when delivered systemically. *Stem Cells Translational Research*, 4 (4): 369-380, 2015.
- 13. Nevitt CD, McKenzie G, Christian K, Austin J, Hencke S, Hoying JB, **LeBlanc AJ**. Physiological Levels of Thrombospondin-1 Decrease NO-Dependent Vasodilation in Coronary Microvessels from Aged Rats. *Am J Physiol Heart Circ Physiol.* 310(11): H1842-50, 2016. PMID: 27199114.
- 14. Barati MT, Ketchem CJ, Merchant ML, Kusiak WB, Jose PA, Weinman EJ, **LeBlanc AJ**, Lederer ED, Khundmiri SJ. Loss of sodium-hydrogen ex 1 changer regulatory factor-1 (NHERF-1) expression prevents dopamine-mediated Na-K ATPase (NKA) regulation in renal proximal tubule cells in primary culture from aged F344 rats. *Am J Physiol Cell Physiol* submitted in July, 2016

Articles Published in Peer Reviewed Journals (Review Articles):

- 1. **LeBlanc AJ**, Krishnan L, Sullivan CJ, Williams SK, Hoying JB. Microvascular Repair: Post-Angiogenesis Vascular Dynamics. *Microcirculation*, 19(8): 676-695, 2012.
- 2. *LeBlanc AJ and Nevitt CD. Targeting the vessel underdogs: therapeutic approaches for microvessel dysfunction in the heart. *Critical Reviews in Biomedical Engineering*, 43(5-6):473-89; 2015. PMID: 27480587. *Corresponding author
- 3. *LeBlanc AJ and Hoying JB. Adaptation of the Coronary Microcirculation in Aging. *Microcirculation*, 23(2):157-67, 2016. PMID: 26661273. *Corresponding author

Articles in Book, Pamphlet or Bulletin:

1. **LeBlanc, AJ**, Y Hu, J Muller-Delp, BT Chen, D Frazer, V Castranova, TR Nurkiewicz. Particulate matter inhalation impairs coronary microvascular reactivity. *Proceedings of 25th European Conference on Microcirculation*, 13-17, 2008.