

CURRICULUM VITAE
Flavia M. Souza

Current Title: Assistant Professor of Physiology

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Birthdate and Birthplace: 10/11/1978 Aracruz, ES, Brazil

Citizenship: US Permanent Resident

Education:

Undergraduate - B.S., Physical Therapy and Respiratory Therapy, Escola de Medicina da Santa Casa de Misericórdia de Vitória (EMESCAM), Vitória, Brazil (2002)

Graduate/Medical - M.S., Physiology, Federal University of Espírito Santo, Vitória, Brazil (2004), PhD, Physiology, Universidade Federal do Espírito Santo, Vitória, Brazil / Pharmacology, LSUHSC, New Orleans, LA (2009)

Post-Doctoral Fellowships - LSUHSC-NO Department of Physiology; Mentor: Dr. Jerome Breslin, Ph.D (2009-2012); LSUHSC-NO Department of Physiology; Mentor: Dr Patricia Molina, MD/Ph.D (2012-2015)

Academic, Professional, and Research Appointments:

Teacher of Biophysics, FAVI Vitória, ES, Brazil (2003)

Instructor of Physiology, LSUHSC-NO Department of Physiology (2015-present)

Membership in Professional Organizations:

2007-present American Physiological Society (member)

2009-present The Microcirculatory Society (member)

2011-present National Hispanic Science Network on Drug Abuse (member)

2013-present Research Society on Alcoholism and Alcohol Abuse (member)

Awards and Honors

2002 Physical Evaluation Teaching Assistant (30% School Tuition), EMESCAM, Brazil

2002 First place in oral communication at the V Meeting of Physical Therapy and Occupational Therapy of Espírito Santo, Brazil

2008 Third place poster presentation. Twenty-Second Annual LSUHSC

Graduate Student Research Day, New Orleans, LA.

2009 Travel Award for the Microcirculatory Society Fall Meeting, October, Columbia, MO

2011 Pappenheimer Postdoctoral Travel Awards Experimental Biology 2011 from the Microcirculatory Society, April, Washington DC

2011 APS/NIDDK Minority Travel Fellowship Award for Experimental Biology 2011, April, Washington DC

2011 Best Postdoctoral Researcher Poster in Cardiovascular. SE Regional IDeA Meeting 2011, New Orleans, LA

2013 Research Recognition Award. Experimental Biology 2013 from the Cardiovascular Section, American Physiological Society, Boston, MA

2013 Travel Award. National Hispanic Science Network (NHSN) Meeting 2013, Bethesda, MD

2013 Travel Award. Alcohol and Immunology Research Interest Group (AIRIG) Annual Meeting 2013, Chicago, IL

2014 Travel Award. National Hispanic Science Network (NHSN) Meeting 2014, El Paso, TX

2014 Travel Award. 1st Pan-American Physiology Without Borders Meeting, Iguacu Falls, Brazil

2015 Research Career Enhancement Award from the American Physiological Society

2016 Travel Award for Experimental Biology 2016, San Diego, CA

2017 Travel Award for the Gordon Research Conference - Alcohol-Induced End Organ Diseases, Ventura, CA

2018 Travel Award. Alcohol and Immunology Research Interest Group (AIRIG) Annual Meeting, January 2018, Denver, CO

TEACHING EXPERIENCE AND RESPONSIBILITIES

Formal Course Responsibilities

Lectures

- 2003** Physical Therapy, *FAVI – Vitoria, Brazil.*
Biophysics (Full Course - 80h)
- 2012** Dental Hygiene General and Oral Physiology, *LSUHSC-NO.*
Endocrine Mechanisms (2h)
Human Physiology – BSN HS2410 Fall, *LSUHSC-NO*
Cardiovascular: Vasculature and Microcirculation (1h)
Cardiovascular: Microcirculation and Venous Return (1h)
Ethics – Graduate School - INT220, *LSUHSC-NO*
Authorship and Peer Review (1h)
- 2013** Dental Hygiene General and Oral Physiology, *LSUHSC-NO*
Endocrine Mechanisms (2h)
Human Physiology – BSN HS2410, *LSUHSC-NO*
Cardiovascular (Spring/Fall): Vasculature and Microcirculation (2h)
Cardiovascular (Spring/Fall): Microcirculation and Venous Return (2h)

- Human Physiology (Physio 6523-1131) – Physician Assistant, *LSUHSC-NO*
 Endocrine: Endocrinology of Pregnancy (1h)
 Endocrinology of Adipose Tissue (1h)
 GI Physiology (8h)
- Renal and Vascular Physiology – Physio 220, *LSUHSC-NO*
 Vascular Reactivity (2h)
- 2014** Human Physiology – BSN HS2410, *LSUHSC-NO*
 Cardiovascular (Spring/Fall): Vasculature and Microcirculation (2h)
 Cardiovascular (Spring/Fall): Microcirculation and Venous Return (2h)
- Human Physiology (Physio 6523-1131) – Physician Assistant, *LSUHSC-NO*
 GI Physiology (8h)
- 2015** Human Physiology – BSN HS2410, *LSUHSC-NO*
 Cardiovascular (Spring/Fall): Vasculature and Microcirculation (2h)
 Cardiovascular (Spring/Fall): Microcirculation and Venous Return (2h)
- Dental Hygiene General and Oral Physiology, *LSUHSC-NO*
 Oral Physiology and GI Physiology (5h)
- Dental General and Oral Physiology, *LSUHSC-NO*
 Cardiovascular: Vasculature and Microcirculation (1h)
 Cardiovascular: Microcirculation and Venous Return (1h)
- Human Physiology (Physio 6523-1131) – Physician Assistant, *LSUHSC-NO*
 GI Physiology (8h)
- Cardiovascular Physiology (Graduate Course – Physio 212), Fall, *LSUHSC-NO*
 Splanchnic Circulation (1h) and Lymph Formation and Flow (1h)
- 2016** Human Physiology – BSN HS2410, *LSUHSC-NO*
 Cardiovascular (Spring/Fall): Vasculature and Microcirculation (2h)
 Cardiovascular (Spring/Fall): Microcirculation and Venous Return (2h)
- Dental Hygiene General and Oral Physiology, *LSUHSC-NO*
 Oral Physiology and GI Physiology (5h)
 Renal Physiology (2h)
- Dental General and Oral Physiology, *LSUHSC-NO*
 Cardiovascular: Vasculature and Microcirculation (1h)
 Cardiovascular: Microcirculation and Venous Return (1h)
- Human Physiology (Physio 6523-1131) – Physician Assistant, *LSUHSC-NO*
 GI Physiology (8h)
- 2017** Biologic Systems I (INTER-131) – Graduate/Physician Assistant/Physical Therapy Students, *LSUHSC-NO*
 GI Physiology (6h)
- Human Physiology – BSN HS2410 Spring, *LSUHSC-NO*

- Cardiovascular (Spring/Fall): Vasculature and Microcirculation (2h)
- Cardiovascular (Spring/Fall): Microcirculation and Venous Return (2h)
- GY Physiology (Fall): Neurophysiology (1h)
- GY Physiology (Fall): Motility (1h)
- GY Physiology (Fall): Secretions (1h)
- GY Physiology (Fall): Digestion and Absorption (1h)
- GY Physiology (Fall): Liver & GI Review from Beginning to End (1h)
- Dental Hygiene General and Oral Physiology, *LSUHSC-NO*
Oral Physiology and GI Physiology (4h)
- Dental General and Oral Physiology, *LSUHSC-NO*
Cardiovascular: Vasculature and Microcirculation (1h)
Cardiovascular: Microcirculation and Venous Return (1h)
- Nursing Pathophysiology, *LSUHSC-NO* –Course Co-director
Shock (1h)
Gastrointestinal Disorders (1h)
Pancreatic & Liver Disorders (1h)
Gut Microbiome (1h)
- Physiology Course, *LSUHSC-NO* – Robert Wood Johnson Foundation
Summer Healthcare Professions Education Program for
Undergraduate Students (4h)
Vascular Physiology (2.5h Lecture/1.5h Lab)
- 2018** Biologic Systems I (INTER-131) – Graduate/Physician Assistant/Physical
Therapy Students, *LSUHSC-NO*
GI Physiology (6h)
- Nursing Pathophysiology, *LSUHSC-NO* –Course Co-director
Shock (1h)

Departmental/Interdisciplinary Teaching Conferences

- 12/11/2008 “Vascular Remodeling of Mesenteric Arteries in Diabetic (db/db) Mice” Department of Physiology, *LSUHSC-NO*, New Orleans, LA.
- 11/15/2011 “Impact of acute alcohol intoxication on rat mesenteric collecting lymphatics contractile mechanisms.” Seminar for Cell Migration Group, *LSUHSC*, New Orleans, LA.
- 11/17/2011 “Impact of acute alcohol intoxication on rat mesenteric collecting lymphatics contractile mechanisms.” Nano-symposium with Dr. Rolando Rumbaut, *LSUHSC*, New Orleans, LA.
- 10/04/2012 “Impact of acute alcohol intoxication on lymphatic contractile mechanisms” Seminar, Department of Physiology, *LSUHSC*
- 10/09/2014 “K Awards” Perspectives on Alcohol Research Seminar, Department of Physiology, *LSUHSC*
- 11/27/2014 “Contribution of lymphatic-adipose crosstalk to alcohol-induced metabolic dysregulation” Seminar, Department of Physiology, *LSUHSC*

- 10/28/2015 “Lymphatic Leak and Lymphatic-Adipose Crosstalk; Role in Alcohol-Induced Metabolic Dysregulation” Seminar, Department of Physiology, LSUHSC
- 04/06/2017 “Mesenteric Lymphatic/ Perilymphatic Adipose Tissue Crosstalk; Mechanism of Alcohol Immunomodulation” Seminar, Department of Physiology, LSUHSC

Undergraduate/High School Students Trained (Research Advisor):

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|----------------------|---|
| Jonathan Solomonow | 2012 LSUHSC Summer Research Internship Program (R25/NIAAA), Undergraduate Student, Tulane University, New Orleans, LA |
| Amy Hui | 2013 LSUHSC Summer Research Internship Program (R25/NIAAA), Undergraduate Student, Washington University in St Louis, St Louis, MO |
| Dibendra Shrestha | LBRN Summer Research Program. Undergraduate Student, LSU Tech, Baton Rouge, LA |
| Nicholas Hourguettes | 2014 LSUHSC Summer Research Internship Program (R25/NIAAA), Undergraduate Student, Washington University in St Louis, St Louis, MO |
| Jonquil Poret | 2014 LSUHSC Summer Research Experiences for Undergraduates (REU/NSF), Undergraduate Student, Xavier University, New Orleans, LA |
| Richard Phillips | 2014 Frontiers in Physiology Fellowship (APS), School Teacher, co-mentored with Dr. Liz Simon |
| Katy Wong | 2015 LSUHSC Summer Research Internship Program (R25/NIAAA), High School Student, Haynes Academy of Advanced Studies, New Orleans, LA |
| Vienna Benavides | 2015 APS Undergraduate Summer Research Fellowship (STRIDE), co-mentored with Dr. Patricia Molina, Undergraduate Student, Cumberland University, Lebanon, TN |
| Wolfe Waguespack | 2016 LSUHSC Summer Research Internship Program (R25/NIAAA), High School Student, Jesuit High School, New Orleans, LA |

RESEARCH AND SCHOLARSHIP

Grants and Contracts:

Funded

LSUHSC-New Orleans Postbaccalaureate Research Education Program in Biomedical Sciences

Submitted: January 2016

Reviewed: November 2016

Funding Period: 09/15/17 – 07/31/22

Total Direct Costs: \$1,318,190
Role: Program Coordinator (30% effort)

Cobre Pilot Grant (Stefany Primeaux - PI)

Submitted: August 2014

Reviewed: September 2014

Funding Period: 02/15 – 06/16

Direct Costs: \$50,000/ year

Title: Susceptibility to Obesity: Effects of Chronic Alcohol Administration

Role: co-PI (10% effort)

T32AA007577 Bagby, G.J. (PI)

Funding Period: 08/15/11-03/14/12

NIH/NIAAA

The Biomedical Alcohol Research Training Program prepares young pre-doctoral PhD and combined MD/PhD students, and postdoctoral fellows with MD and/or PhD degrees for research careers on the biomedical consequences of alcohol consumption and abuse.

Role: Post-doctoral Fellow

Individual Ruth L. Kirschstein National Research Service Award (NRSA)

NIH/NIAAA

1F32AA021049-01A1

Funding Period: 03/15/12-03/14/15

Direct Costs: \$52,190/ year

Title: Impact of alcohol intoxication on lymphatic contractile mechanisms

Role: PI (75% effort)

Pending

Academic Career Award (Parent K01)

Submitted: June 2017

Reviewed: December 2017

Funding Period: 03/18 – 02/23

Direct Costs: \$140,000/ year

Title: Mesenteric Lymphatic / Perilymphatic Adipose Tissue Crosstalk; Mechanism of Alcohol Immunomodulation

Role: PI (75% effort)

Non-funded applications (last three years)

Academic Career Award (Parent K01)

Submitted: February 2015

Reviewed: June 2015 – Score - 22

Funding Period: 09/15 – 08/20

Direct Costs: \$140,000/ year

Title: Alcohol-induced metabolic dysregulation; role of lymphatic adipose crosstalk

Role: PI (75% effort)

Alcohol and Drug Abuse Center of Excellence (ADACE) Pilot Project

Submitted: October 2013

Reviewed: November 2013

Funding Period: 01/14– 12/14

Direct Costs: \$15,000/ year

Title: Role of multiple binge-drinking on lymphatic permeability and lymphatic crosstalk with perilymphatic adipose tissue in rats.

Role: PI (15% effort)

Academic Career Award (Parent K07)

Submitted: June 2014

Reviewed: October 2014

Funding Period: 03/15 – 02/20

Direct Costs: \$140,000/ year

Title: Alcohol-induced mesenteric lymphatic-adipose crosstalk; metabolic impact

Role: PI (75% effort)

Journal Publications:

1. Gonçalves WL, **Souza FM**, Conti CL, Cirqueira JP, Rocha WA, Pires JG, Barros LA, Moysés MR. Influence of He-Ne laser therapy on the dynamics of wound healing in mice treated with anti-inflammatory drugs. *Braz J Med Biol Res.* 2007 40:877-84. PMID: 17581688
2. **Souza FM**, Padilha AS, Stefanon I, Vassallo DV. Differences in functional and structural properties of segments of the rat tail artery. *Braz J Med Biol Res.* 2008 41:416-23. PMID: 18516469
3. **Souza-Smith FM**, Kurtz KM, Molina PE, Breslin JW. Adaptation of Mesenteric Collecting Lymphatic Pump Function Following Acute Alcohol Intoxication. *Microcirculation.* 2010 Oct; 17:514-524. PMID: 21040117
4. Katz PS, Trask AJ, **Souza-Smith FM**, Hutchinson KR, Galantowicz ML, Lord KC, Stewart JA Jr, 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, Jul 10. PMID: 21744279
5. **Souza-Smith FM**, Katz PS, Trask AJ, Stewart JA, Lord KC, Varner KJ, Vassallo DV, Lucchesi PA. Mesenteric resistance arteries in type 2 diabetic mice undergo outward remodeling. *PLoS One.* 2011 Aug; 6(8):e23337. PMID: 21829729

6. **Souza-Smith FM**, Kurtz KM, Breslin JW. Measurement of cytosolic Ca^{2+} in isolated contractile lymphatics. *J Vis Exp*. 2011 Dec 8;(58). pii: 3438. doi: 10.3791/3438. PMID: 22214883
7. **Souza-Smith FM**, Molina PE, Breslin JW. Reduced RhoA activity mediates acute alcohol intoxication-induced inhibition of lymphatic myogenic constriction despite increased cytosolic $[\text{Ca}^{2+}]$. *Microcirculation*. 2013 Jul; 20(5):377-84. PMID: 23237297
8. Molina, PA, Gardner JD, **Souza-Smith FM**, Whitaker AM. Alcohol abuse; critical pathophysiological processes & contribution to disease burden. *Physiology (Bethesda)*. 2014 May;29(3):203-15. PMID: 24789985
9. Kurtz KH, **Souza-Smith FM**, Moor AN, and Jerome W. Breslin. Rho Kinase Enhances Contractions of Rat Mesenteric Collecting Lymphatics. *PLoS One*. 2014 Apr 7;9(4):e94082. PMID: 24710574
10. Kurtz KH, Moor AN, **Souza-Smith FM**, Breslin JW. Involvement of H1 and H2 receptors and soluble guanylate cyclase in histamine-induced relaxation of rat mesenteric collecting lymphatics. *Microcirculation*, 2014. PMID: 24702851
11. Breslin JW, Zhang XE, Worthylake RA, **Souza-Smith FM**. Involvement of Local Lamellipodia in Endothelial Barrier Function. *Plos One*. 2015 Feb 6;10(2):e0117970 PMID: 25658915
12. **Souza-Smith FM**, Kerut EK, Breslin JW, Molina PE. Mechanisms of Acute Alcohol Intoxication-Induced Modulation of Cyclic Mobilization of $[\text{Ca}_2^+]_i$ in Rat Mesenteric Lymphatic Vessels. *Lymphat Res Biol*. 2015 Jun;13(2):93-9 PMID: 26056854
13. **Souza-Smith FM**, Siggins RW, Molina PE. Mesenteric lymphatic-perilymphatic adipose crosstalk; role in alcohol-induced perilymphatic adipose tissue inflammation. *Alcohol Clin Exp Res*. 2015 Aug;39(8):1380-7 PMID: 26147204
14. Molina PE, Dodd T, Ford S, Katz PS, Maxi J, Mayeux J, Simon L, **Souza-Smith FM**, Teng S. Alcohol - Burden on Immunity following burn, hemorrhagic shock or traumatic brain injury. *Alcohol Res*. 2015;37(2):263-78 PMID: 26695749
15. Breslin JW, Daines DA, Doggett TM, Kurtz KH, **Souza-Smith FM**, Wu MH, Yuan SY. Rnd3 as a Novel Target to Ameliorate Microvascular Leakage. *J Am Heart Assoc*. 2016 Apr 5;5(4). PMID: 27048969
16. Mouton, A., Maxi, J., **Souza-Smith, F.**, Bagby, G., Gilpin, N., Molina, P., Gardner, J. Alcohol Vapor Inhalation as a Model of Alcohol-Induced Organ Disease. *Alcohol Clin Exp Res*. 2016 Aug;40(8):1671-8. PMID: 27375174

17. **Souza-Smith FM**, Lang CH, Nagy LE, Bailey SM, Parsons LH, Murray G. APS President's Symposium series – Physiological Processes Underlying Organ Injury in Alcohol Abuse. *Am J Physiol Endocrinol Metab.* 2016 Jul 19 [Epub ahead of print] PMID: 27436613

18. **Souza-Smith FM**, Ford SM, Simon L, Molina PE. Repeated Binge-Like Alcohol Intoxication: Depot Specific Adipose Tissue Immuno-Metabolic Dysregulation. *Shock.* 2017 Aug;48(2):243-250. PMID: 28125531

19. Poret J, **Souza-Smith F**, Marcell S, Gaudet D, Tzeng T, Braymer H, Harrison-Bernard L, Primeaux S. High fat diet consumption differentially affects adipose tissue inflammation and adipocyte size in obesity-prone and obesity-resistant rats. *Int J Obes (Lond)*, 2017 Nov 20. PMID: 29151595

Published Abstracts:

1. **Souza FM**, Wiggers GA, Stefanon I, Vassallo DV, Padilha AS. The rat tail artery can behave as a resistance or conductance vessel depending on the segment investigated. In: VI International Symposium- Vasoactive Peptides, 2006, Ouro Preto. *Anais do VI International Symposium- Vasoactive Peptides*, 2006.

2. Katz PS, Rocic P, **Souza FM**, Matrougui K, Lord KV, Lucchesi PA. Increased oxidative stress modulates coronary artery remodeling and passive stiffness in db/db diabetic mice. *FASEB J.* 2007 21:959.3.

3. **Souza FM**, Katz PS, Lord KC, Potter B, Vassallo DV, Lucchesi PA. Hypertrophic remodeling of diabetic mesenteric resistance arteries is attenuated by Tempol and Apocynin. *FASEB J.* 2008 22:732.6.

4. Katz PS, **Souza FM**, Reed RE, Lord KV, Lucchesi PA. A role for angiotensin and oxidative stress in diabetes-induced coronary artery remodeling. *FASEB J.* 2008 22:1147.9.

5. **Souza, FM**, Kurtz, KM, Molina, PE, Breslin, J.W. Adaptation of mesenteric collecting lymphatics to acute alcohol intoxication. *Microcirculation* 16: 751. 2009.

6. **Souza FM**, Katz PS, Stewart JA, Vassallo DV, Lucchesi PA. Vascular remodeling of mesenteric resistance arteries in diabetic mice. *FASEB J.* 2009 23:990.19.

7. **Souza, FM**, Kurtz, KM, Molina, PE, Breslin, JW. Adapted mesenteric lymphatic function following acute alcohol intoxication. *Lymphatics in the Digestive System, Physiology, Health, and Disease* (meeting sponsored by NIDDK), Bethesda, MD, Nov. 3-4, 2009.

8. **Souza, FM**, Kurtz, KM, Molina, PE, Breslin, JW. Decreased myogenic tone of mesenteric collecting lymphatics following alcohol intoxication. Louisiana NCRR/IDEA 2010 Biomedical Research Symposium, Baton Rouge, LA, Jan. 22, 2010.
9. Breslin, JW, Maietta, DA., Kurtz, KM., Doggett, TM. **Souza, FM.**, Worthylake, RA. GFP-actin dynamics during histamine-induced endothelial barrier dysfunction. *FASEB J.* 24:975.7, 2010.
10. **Flavia Moreira Souza-Smith**, Travis M Doggett, and Jerome W Breslin. Epac1/Rap1 and Rnd3 signaling pathways inhibit hemorrhagic shock-induced venular hyperpermeability. *FASEB J* March 17, 2011 25:1022.8.
11. **Flavia Moreira Souza**, Kristine Kurtz, Patricia Molina, and Jerome Breslin. Acute alcohol intoxication increases the magnitude of phasic Ca²⁺ transients in rat mesenteric collecting lymphatics. *FASEB J* March 17, 2011 25:632.4.
12. Travis Matthew Doggett, Kristine M Kurtz, Jesse K Sulzer, Annie M Whitaker, Marisa B Belaidi, **Flavia M Souza-Smith**, Patricia E Molina, and Jerome W Breslin. Cell-permeable Rnd3 protein reduces hemorrhagic shock/resuscitation-induced microvascular leakage in the rat mesentery. *FASEB J* March 17, 2011 25:1022.2.
13. Kristine M Kurtz, **Flavia Souza-Smith**, and Jerome W Breslin. Rho kinase enhances tone in contractile lymphatics. *FASEB J* March 17, 2011 25:632.1.
14. Kristine M Kurtz, **Flavia M Souza-Smith**, and Jerome W Breslin. Rho kinase-mediated calcium sensitization in tonic and phasic contractions of mesenteric collecting lymphatic vessels. *FASEB J* March 29, 2012 26: 677.7.
15. **Flavia Moreira Souza-Smith**, Kristine K Kurtz, and Jerome W Breslin. Reduced RhoA activity mediates the acute alcohol intoxication-induced reduction of lymphatic myogenic constriction independently of cytosolic [Ca²⁺]. *FASEB J* March 29, 2012 26: 677.8.
16. **Flavia M. Souza-Smith**, Jerome W. Breslin, and Patricia Molina. Role of L-type calcium channels in acute alcohol intoxication-induced enhancement of lymphatic calcium transient magnitude. *FASEB J* April 9, 2013 27:681.6
17. Kristine M Kurtz, **Flavia M Souza-Smith**, and Jerome W Breslin. Involvement of NO/sGC, but not ROCK, in histamine-induced collecting lymphatic relaxation. *FASEB J* April 9, 2013 27:681.12
18. **Souza-Smith FM**, Breslin JW, Molina PE. L-type calcium channels contribute to alcohol intoxication-induced increase in lymphatic calcium transient

magnitude. 2013, Alcoholism Clinical and Experimental Research, vol 37, suppl 2, 57A.

19. **Souza-Smith F**, Berner P, Molina P. Acute alcohol intoxication increases lymphatic permeability and promotes a perilymphatic adipose tissue inflammatory milieu. 2013, Alcohol, vol 47, issue 7, 575.

20. **Souza-Smith FM**, Breslin JW, Molina PE. Alcohol-induced lymphatic hyperpermeability and PLAT inflammatory milieu disruption is associated with decreased adiponectin levels. Alcoholism Clinical and Experimental Research, vol 49, suppl 2, 106A.

21. **Souza-Smith F**, Molina P. Repeated Binge-Like Alcohol Intoxication Increases Mesenteric Lymphatic Permeability Disrupting Lymphatic-Perilymphatic Adipose Tissue Crosstalk. April 2015 The FASEB Journal vol. 29 no. 1 Supplement 995.5

22. **Flavia Souza-Smith**, H. Doug Braymer, Timothy Allerton, Tony Tzeng, Lisa Harrison-Bernard and Stefany Primeaux. Expression of Inflammatory Markers in Visceral Fat of Obesity-prone Rats is Increased by High Fat Diet Consumption. April 2015 The FASEB Journal vol. 29 no. 1 Supplement LB658

23. **Souza-Smith FM**, Song K, Molina PE. Repeated Binge-Like Alcohol Intoxication Dysregulates Mesenteric Perilymphatic Adipose Tissue Lipogenic Gene Expression
FASEB J April 2016 3

24. Vienna Isabel Benavides VI, Song K, Molina PE, **Souza-Smith FM** Repeated Binge-Like Alcohol Intoxication-Induced Adaptive Immunity in Perilymphatic Adipose Tissue
FASEB J April 2016 30:1292.6

25. Primeaux S, **Souza-Smith F**, Poret J, Mouton A, Marcell S, Battle C, Braymer HD, Harrison-Bernard L. Adipose Inflammation and Cardiovascular Disease Risk Factors in Obesity-Prone Osborne-Mendel and Obesity-Resistant S5B/PI Rats FASEB J April 2016 30:

Scientific Presentations:

Local

12/13/2013 Acute Alcohol Increases Lymphatic Permeability and Promotes a Perilymphatic Adipose Tissue Inflammatory Milieu, ADACE Meeting, LSUHSC

National

10/16/2009 "Adaptation of Mesenteric Collecting Lymphatics to Acute Alcohol Intoxication" Oral Presentation at the Microcirculatory Society Fall Meeting, October 16-18, 2009, Columbia, MO.

- 04/12/2011 “Epac1/Rap1 and Rnd3 Signaling Pathways Inhibit Hemorrhagic Shock-Induced Venular Hyperpermeability” Oral Presentation at Experimental Biology 2011, Washington DC.
- 05/20/2011 “Acute alcohol intoxication increases the magnitude of phasic Ca²⁺ transients in rat mesenteric collecting lymphatics” Oral Presentation at Gulf Coast Physiology Society Meeting, Jackson, MS.
- 04/21/2012 “Reduced RhoA activity mediates the acute alcohol intoxication-induced reduction of lymphatic myogenic constriction independently of cytosolic [Ca²⁺]” Oral Presentation at Experimental Biology 2012, San Diego
- 11/21/2013 “Acute Alcohol Increases Lymphatic Permeability and Promotes a Perilymphatic Adipose Tissue Inflammatory Milieu”, AIRIG Meeting, Loyola University, Chicago
- 06/21/2015 “Lymphatic Leak and Lymphatic-Adipose Crosstalk; Role in Alcohol-Induced Metabolic Dysregulation”, 38th RSA Meeting, San Antonio, TX
- 06/26/2016 Repeated Binge-Like Alcohol Intoxication-Induced Metabolic Dysregulation is Adipose Depot-Specific, 39th RSA Meeting, New Orleans, LA
- 03/28/2017 Mesenteric Lymphatic/ Perilymphatic Adipose Tissue Crosstalk; Mechanism of Alcohol Immunomodulation, Gordon Conference, Alcohol on End Organ Disease, Ventura, CA
- 01/26/2018 Alcohol-Induced Adipocentric Immunometabolic Dysregulation. AIRIG, Denver, CO

International

- 08/03/2014 Impact of Inflammatory Insult on Lymphatic Contractility and Lymph Transport, 1st Pan-American Physiology Without Borders Meeting, Iguassu Falls, Brazil

Editorial Posts and Activities:

Ad hoc reviewer for Microcirculation Journal, Vascular Pharmacology Journal, Plos One, Biomolecules. International Journal of Molecular Sciences, Journal of Vascular Research, British Journal of Pharmacology, AJP Endocrine and Metabolism, AJP Regulatory, Integrative and Comparative Physiology.

Conference and Grant Writing Session Organizer for the National Hispanic Science Network Conference, 2016, Palm Springs, CA

SERVICE ACTIVITIES

Committee Services:

- 2015** Outreach Science Fest Committee. The purpose of this meeting is to connect with the community where educators, counselors

and youth workers will be invited to a half a day meeting focus on Youth Alcohol Abuse. At LSUHSC-NO on August 10 2015.

- 2015/16** Award committee for the Microcirculatory Society
- 2015/16** Organizing committee of the National Hispanic Science Network Conference, 2016, Palm Springs, CA
- 2016/17** Organizing committee of the National Hispanic Science Network Conference, 2017, Phoenix, AR
- 2017/18** Organizing committee of the National Hispanic Science Network Conference, 2018, Bethesda, MD

Administrative Responsibilities:

- 2016/17** Physiology Department Coordinator of Summer Students Activities

Community Service Activities:

- 2011** PhUn Week: What is a scientist? / Blood Vessel
 - Mandeville Middle School, Mandeville, LA; November 3
 - Kindergarten (host – Kristine Kurtz)
 - 2rd grade (host – Kristine Kurtz)
 - 6rd grade (host – Kristine Kurtz)
- 2012** Xavier University's Recovery Day sponsored by the Substance Abuse and Mental Health Service Administration (SAHMSA)
 - Xavier University Center, New Orleans, LA; September 12
- 2015** PhUn Week: What is a scientist? / Blood Vessel
 - Holly Name of Jesus School, New Orleans, LA; November 13
 - Kindergarten (host – Flavia M. Souza-Smith)
- 2016** PhUn Week: Healthy Heart
 - Holly Name of Jesus School, New Orleans, LA; November 29
 - 1st Grade (host – Flavia M. Souza-Smith)
- 2017** PhUn Week: Healthy Heart
 - Marie B. Riviere Elementary School, Metairie, LA; November 03
 - 5th Grade (host – Flavia M. Souza-Smith)