**CURRICULUM VITAE**

**Flavia M. Souza**

**Current Title:** Assistant Professor of Physiology

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**Education:**

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

**Graduate/Medical -** M.S., Physiology, Federal University of Espirito Santo, Vitoria, Brazil (2004), PhD, Physiology, Universidade Federal do Espirito Santo, Vitoria, 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 Vitoria, ES, Brazil (2003)

Instructor of Physiology, LSUHSC-NO Department of Physiology (2015-2017)

Assistant Professor, LSUHSC-NO Department of Physiology (2018-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 Espirito 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

**2018** Invited by National Hispanic Science Network (NHSN) Director to represent leading early career scientists as a speaker on the Veteranas panel, NHSN 2018 Meeting, October 2018, Bethesda, ML

**2019** 2019 International Opportunity Program Award. Organizer of the *Basics in Physiological Research Workshop* to be held May 27, 2019 at Instituto de Ciencias Básicas y Preclinicas in Havana, Cuba.

**2019** Travel Award to attend the 2nd Pan-American Meeting, Physiology Without Borders in Havana, Cuba.

**TEACHING EXPERIENCE AND RESPONSIBILITIES**

**Formal Course Responsibilities**

Director of Human Pathophysiology for Nursing Students (HLSC3410)--Traditional track

Co-Director of Human Pathophysiology for Nursing Students (HLSC3410CA)--Accelerated track

**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 (2h)

Gastrointestinal Disorders (3h)

Pancreatic & Liver Disorders (3h)

Gut Microbiome (3h)

Human Physiology – BSN HS2410, *LSUHSC-NO*

Cardiovascular (Spring): Vasculature and Microcirculation (1h)

Cardiovascular (Spring): Microcirculation and Venous Return (1h)

GY Physiology (Spring / Fall): Neurophysiology (2h)

GY Physiology (Spring / Fall): Motility (2h)

GY Physiology (Spring / Fall): Secretions (2h)

GY Physiology (Spring / Fall): Digestion and Absorption (2h)

GY Physiology (Spring / Fall): Liver & GI Review from Beginning to End (2h)

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)

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)

**2019** Biologic Systems I (INTER-131) – Graduate/Physician Assistant/Physical Therapy Students, *LSUHSC-NO*

GI Physiology (6h)

Nursing Pathophysiology, *LSUHSC-NO –*Course Co-director

Gastrointestinal Disorders (3h)

Pancreatic & Liver Disorders (3h)

Gut Microbiome (3h)

Human Physiology – BSN HS2410, *LSUHSC-NO*

GY Physiology: General Concepts in GI Physiology (2h)

GY Physiology: Motility (2h)

GY Physiology: Secretions (2h)

GY Physiology: Digestion and Absorption (2h)

GY Physiology: Liver & GI Review from Beginning to End (1h)

Dental Hygiene General and Oral Physiology, *LSUHSC-NO*

Oral Physiology and GI Physiology (4h)

**2020** Biologic Systems I (INTER-131) – Graduate/Physician Assistant/Physical Therapy Students, *LSUHSC-NO*

GI Physiology (6h)

Nursing Pathophysiology, *LSUHSC-NO –* Course Co-director Winter/Spring; Course Director Fall

Gastrointestinal Disorders (3h)

Pancreatic & Liver Disorders (3h)

Human Physiology – BSN HS2410, *LSUHSC-NO Spring and Fall*

GY Physiology: General Concepts in GI Physiology (2h)

GY Physiology: Motility (2h)

GY Physiology: Secretions (2h)

GY Physiology: Digestion and Absorption (2h)

GY Physiology: Liver & GI Review from Beginning to End (2h)

Dental Hygiene General and Oral Physiology, *LSUHSC-NO*

Oral Physiology and GI Physiology (4h)

**2021** Biologic Systems I (INTER-131) – Graduate/Physician Assistant/Physical Therapy Students, *LSUHSC-NO* - *Spring*

GI Physiology (6h)

Nursing Pathophysiology, *LSUHSC-NO –* Course Co-director *Winter/Spring*; Course Director *Fall*

Gastrointestinal Disorders (3h)

Pancreatic & Liver Disorders (3h)

Human Physiology – BSN HS2410, *LSUHSC-NO Spring and Fall*

GY Physiology: General Concepts in GI Physiology (2h)

GY Physiology: Motility (2h)

GY Physiology: Secretions (2h)

GY Physiology: Digestion and Absorption (2h)

GY Physiology: Liver & GI Review from Beginning to End (2h)

IDP Students Professionalism Course – Lab safety and Dress for Success (1h)

**2022** Biologic Systems I (INTER-131) – Graduate/Physician Assistant/Physical Therapy Students, *LSUHSC-NO* - *Spring*

GI Physiology (6h)

Nursing Pathophysiology, *LSUHSC-NO –* Course Co-director *Winter/Spring*; Course Director *Fall*

Gastrointestinal Disorders (3h)

Pancreatic & Liver Disorders (3h)

Human Physiology – BSN HS2410, *LSUHSC-NO Spring and Fall*

GY Physiology: General Concepts in GI Physiology (2h)

GY Physiology: Motility (2h)

GY Physiology: Secretions (2h)

GY Physiology: Digestion and Absorption (2h)

GY Physiology: Liver & GI Review from Beginning to End (2h)

IDP Students Professionalism Course – Lab safety and Dress for Success (1h)

**Seminars**

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

03/22/2018 “Alcohol Immunomodulation of Mesenteric Lymphatic/ Perilymphatic Adipose Tissue Crosstalk, Cardiovascular Center, LSUHSC

11/30/2018 “Mesenteric Lymphatic/ Perilymphatic Adipose Tissue Crosstalk; Mechanism of Alcohol Immunomodulation, Pharmacology Department, Tulane University

10/29/2020 “Mesenteric Lymphatic/ Perilymphatic Adipose Tissue Crosstalk; Mechanism of Alcohol Immunomodulation”, Physiology Department, LSUHSC

**High School/Undergraduate/Medical Students Trained (Research Advisor):**

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

Riley T. Nguyen 2018 LSUHSC Summer Research Internship Program (R25/NIAAA), High School Student, Patrick F. Taylor Academy, Avondale, LA

Matthew Herrera Sep-Oct 2018, LSUHSC Rotation Master’s Student (6 weeks)

Peter Albares 2019 LSUHSC Medical Student Summer Research Internship Program (R25/NIAAA), Medical Student, LSUHSC, New Orleans, LA

Tyler Dillon 2020 LSUHSC Medical Student Summer Research Internship Program (R25/NIAAA), Medical Student, LSUHSC, New Orleans, LA

Kourtney Weaver 2021 LSUHSC Medical Student Summer Research Internship Program (R25/NIAAA), Medical Student, LSUHSC, New Orleans, LA

**Students Trained (Mentor):**

Matthew Herrera Master’s Student, graduated in May 2020, currently in medical school

**RESEARCH AND SCHOLARSHIP**

**Grants and Contracts:**

**Funded**

Academic Career Award (Parent K01)

*Submitted*: June 2017

*Reviewed:* December 2017

*Funding Period:* 07/18 – 06/23

*Direct Costs:* $181,000/ year

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

*Role:* PI (75% effort)

2018 Nutrition and Obesity Research Center (NORC) Pilot/Feasibility Grant

*Submitted*: April 2018

*Reviewed:* May 2018

*Funding Period:* 05/24/18 – 05/23/20

*Total Direct Costs:* $24,120/ year

*Role:* Co-PI (5% affort)

LSUHSC-New Orleans Postbaccalaureate Research Education Program in Biomedical Sciences(Lisa Harrison-Bernard – PI)

*Submitted*: January 2016

*Reviewed:* November 2016

*Funding Period:* 09/15/17 – 06/30/18

*Total Direct Costs:* $1,318,190

*Role:* Program Coordinator (30% effort)

Cobre Pilot Grant

*Submitted*: August 2014

*Reviewed:* September 2014

*Funding Period:* 02/15 – 06/17

*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](http://grants.nih.gov/training/nrsa.htm)/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)

**Non-funded applications (last three years)**

Research Project Grant Program (R01)

*Submitted*: February 2018

*Reviewed:* June 2018 – Not Discussed

*Funding Period:* 09/18 – 08/23

*Direct Costs:* $140,000/ year

*Title:* Mesenteric Lymphatic Leak and Metabolic Dysregulation

*Role:* co-PI (20% 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.](http://www.ncbi.nlm.nih.gov/pubmed/21744279) 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.](http://www.ncbi.nlm.nih.gov/pubmed/21829729) 2011 Aug; 6(8):e23337. PMID: 21829729

6. **Souza-Smith FM**, Kurtz KM, Breslin JW. Measurement of cytosolic Ca2+ 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 [Ca2+]. 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. KurtzKH, **Souza-SmithFM**, MoorAN, 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 [Ca2+] in Rat Mesenteric Lymphatic Vessels.](http://www.ncbi.nlm.nih.gov/pubmed/26056854) 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. Am J Physiol Endocrinol Metab. 2016 Sep 1;311(3):E605-19. 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), Mar 2018. PMID: 29151595

20. Choudhry M, Gao B, Jia L, Meena AS, Kuprys PV, Roper P, Mandrekar P, **Souza-Smith FM**, Curtis BJ, McGowan J, Camargo M, Fujita M, Wyatt T, Tsukamoto H, Coopersmith C, Foster M, Raju V, Kovacs E, Hulsebus H, Marshall A. Summary of the 2018 Alcohol and Immunology Research Interest Group (AIRIG) Meeting.Alcohol. 2019 Jun;77:11-18. PMID 30763905

21. Poret J, Battle C, Mouton A, Gaudet D, Dowling T, **Souza-Smith F**, Gardner J, Braymer H, Harrison-Bernard L, Primeaux S. The prevalence of cardio-metabolic risk factors is differentially elevated in obesity-prone Osborne-Mendel and obesity-resistant S5B/Pl rats. Life Sci. 2019 Apr 15;223:95-101. PMID: 30872180

22. **Souza-Smith FM**, Simon L, Siggins R, Molina P. Alcohol-Induced Mesenteric Lymphatic Permeability; Link to Immunometabolic Modulation of Perilymphatic Adipose Tissue. Int. J. Mol. Sci., Aug 2019, 20(17) 4097. PMID: 31443389

23. Harrison-Bernard L, Augustus-Wallace A, **Souza-Smith F**, Tsien F, Casey G, Gunaldo T. Knowledge Gains in a Professional Development Workshop on Diversity, Equity, Inclusion, and Implicit Bias in Academia. Adv Physiol Educ. 2020 Sep 1;44(3):286-294. PMID: 32484403

24. Herrera M, Molina P, **Souza-Smith FM.** Ethanol-induced lymphatic endothelial cell permeability via MAP-kinase regulation.Am J Physiol Cell Physiol. 2021 July 1;321(1):C104-C116. PMID: 33909502

25. **Souza-Smith FM**, Albrechet-Souza L, Avegno EM, Ball CD, Ferguson TF, Harrison-Bernard LM, Molina PE**.** Perspectives Against Racism: educational and socialization efforts at the departmental level**.** Adv Physiol Educ. 2021 Dec 1;45(4):720-729. PMID: 34498936

26. Simon L, **Souza-Smith FM**, Molina PE. Alcohol-Associated Tissue Injury: Current Views on Pathophysiological Mechanisms. Annu Rev Physiol., 2022, 10;84:87-112. PMID: 35143331

**Scientific Presentations:**

**Local**

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

01/24/2020 “Mesenteric Lymphatic Leak and Metabolic Dysregulation” Oral Presentation at the Obesity Day hosted by The Pennington/Louisiana NORC at the University Medical Center, New Orleans, LA.

**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, CA.

11/21/2013 “Acute Alcohol Increases Lymphatic Permeability and Promotes a Perilymphatic Adipose Tissue Inflammatory Milieu”, AIRIG Meeting, Loyola University, Chicago, IL.

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 Research Conference, Alcohol on End Organ Disease, Ventura, CA

01/26/2018 Alcohol-Induced Adipocentric Immunemetabolic Dysregulation. AIRIG, Denver, CO

10/05/2018 Lymphatic Adipose Crosstalk in Alcohol Immunomodulation. 18th National Hispanic Science Network, Bethesda, MA

04/06/2019 “Gonadal Hormone Loss and Obesity-Induced Lymphatic Leakage – Epigenetic Mechanisms” Oral Presentation at the Microcirculatory Society session, Emerging Topics: “Adaptation of Microvessels and Lymphatics” at Experimental Biology 2019, Orlando, FL.

04/27/2021 “Receiving and Responding to Grant Reviews (An Early Career Perspective)” Oral Presentation at the Mentoring Symposium on Evaluation and Critiques: Giving and Receiving Critiques on Grant Proposals, at Experimental Biology 2021, online format.

04/27/2022 Role of Lymph from Alcohol-Treated Animals on Naïve Perilymphatic Adipose Tissue Immunomodulation, Gordon Research Conference, Alcohol on End Organ Disease, Ventura, CA

**International**

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

08/19-21/2015 Instructor of the Basics in Physiological Research Workshop, Universidad Francisco Marroquin Facultad de Medicina, Guatemala City, Guatemala. Sponsored by the American Physiological Society

09/10/2018 Lymphatic Adipose Crosstalk in Alcohol Immunomodulation. 11th World Congress for Microcirculation, Vancouver, BC, Canada

05/27/2019 Lecturer and Organizer of the Basics in Physiological Research Workshop at Instituto de Ciencias Básicas y Preclinicas in Havana, Cuba. Sponsored by the American Physiological Society

**Study Section Service:**

Nov 2022 ADACE Pilot Grant study section at LSUHSC

Oct 2022 NIH study section, Digestive and Nutrition Physiology and Diseases (DNPD)

**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, Alcohol, ACER.
* Member of the Editorial Board of Microcirculation Journal - 2015-2018
* Conference and Grant Writing Session Organizer for the National Hispanic Science Network Conference, 2016, Palm Springs, CA.
* Co-Organizer. The APS President’s Symposium Series: Physiological mechanisms responsive to behavioral and environmental challenges. Experimental Biology 2016. San Diego, CA. April 3-6, 2016. Organizer: Patricia Molina. \*Review (summary and critical commentary): 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 Phys Endocrinol Metab 2016
* Associate Editor for Life Sciences Journal 2019-2024
* Co-Chair. Updating the history of insulin; Novel insights into regulation of release, delivery, and functions history of physiology group. Experimental Biology. Orlando, FL. April 8, 2019. Chair: Dr. Patricia Molina; Co-Chair: Dr. Flavia Souza-Smith
* Coordinator and chair of the Community Panel at the 19th National Hispanic Science Network 2019, New Orleans, LA
* LSUHSC Department of Physiology Wellbeing Committee 2019-
* Co-Chair, with Binu Tharakan (Morehouse School of Medicine) of a Microcirculatory Society Session at Experimental Biology 2021 entitled Circulatory Shock and Microvascular Dysfunction, Virtual format.
* Pilot grant reviewer part of internal study sections at LSUHSC, FALL 2021
* In 2021, after I registered to the CCTS Training Academy’s Mock NIH Study Section, I was invited by the University of Alabama to review a grant and be a part of a NIH Mock Study Section
* Organizer of the Alcohol and Drug Abuse Center (ADACE) Spring Meeting in New Orleans, May 2022, entitled Holistic Interventions in Alcohol and Drug Use Disorders.
* Discussant for the Grant Writing Webinar for the National Hispanic Science Network Early Career Leadership Committee Event on May 2022
* Mentoring Session Organizer and Co-Chair for the National Hispanic Science Network Conference, 2022, Grand Rapids, MI.

**SERVICE ACTIVITIES**

**Committee Services:**

**2015** Outreach Science Fest Committee. The purpose of this meeting was to connect with the community where educators, counselors and youth workers were 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

**2018/19** Organizing committee of the National Hispanic Science Network Conference, 2019, New Orleans, LA

**2018-** Member of the Wellbeing Committee at the Physiology Department at LSUHSC

**2018-** Member of the Wellness Committee (School of Medicine) at LSUHSC -*co-chair position starting Nov 2022*

**2019/20** Organizing committee of the National Hispanic Science Network Conference, 2020, Virtual Format

**2020/21** Organizing committee of the National Hispanic Science Network Conference, 2021, Virtual Format

**2020** Organizer of the Perspectives Against Racism Summer Program at the Physiology Department at LSUHSC

**2021** Member of the APS International Committee, 2022-2025

**2021-** Member of the Diversity, Equity, and Inclusivity Committee

**2020/21** Organizing committee of the National Hispanic Science Network Conference, 2022, Grand Rapids, MI

**2022-** New Student Orientation Committee (School of Graduate Studies) at LSUHSC

**Administrative Responsibilities:**

**2016-2020** Physiology Department Coordinator of Summer Students Activities

**2020** Physiology Department Coordinator of Summer Perspective Against Racism seminar Series

**2021-** Physiology Seminar Series Coordinator and Organizer

**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)

**2019** Greater New Orleans Science and Engineering Fair (GNOSEF)

* Judge. Wednesday, February 20, Loyola University, New Orleans, LA

**2021** Greater New Orleans Science and Engineering Fair (GNOSEF)

* Judge. Wednesday, February 22, online format