



## **CURRICULUM VITAE**

**Flavia M. Souza-Smith**

**Current Title:** Assistant Professor Research

**Business Address:** Perdido St, Box P7-3 New Orleans, LA 70112-1393

**Business Telephone and Fax:** 504- 568-6179 and 504-568- 6158

**Business email Address:** fsouz1@lsuhsc.edu

### **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. 1<sup>st</sup> 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, MD
- 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 Preclínicas in Havana, Cuba.
- 2019** Travel Award to attend the 2<sup>nd</sup> Pan-American Meeting, Physiology Without Borders in Havana, Cuba.
- 2022** Travel Award to attend Alcohol and Immunology Research Interest Group (AIRIG) Annual Meeting, October 2022, Big Island, HI
- 2023** Recipient of the 2023 Chancellor's Excellence Award in recognition for her outstanding contributions to LSUHSC-NO

## **TEACHING EXPERIENCE AND RESPONSIBILITIES**

### **Course Directorships**

- 2019-** Co-Director of Human Pathophysiology for Nursing Students (HLSC3410CA) - Accelerated track, School of Nursing
- 2019-** Co-Director of Human Pathophysiology for Nursing Students (HLSC3410) - Traditional track, Fall Semester, School of Nursing
- 2019-2023** Co-Director of GI Block for Human Physiology (PHTH7120) - School of Graduate Studies
- 2021-** Director of Human Pathophysiology for Nursing Students (HLSC3410) - Traditional track, Spring Semester, School of Nursing
- 2022-** Director of Seminar Course in Physiology - School of Graduate Studies
- 2023** Director of Respiratory Block for Human Physiology (PHTH7120) - School of Graduate Studies
- 2023** Director of Professionalism I Students (Fall) School of Graduate Studies
- 2024-** Director of Human Physiology (HLSC2410) - Spring Semester, School of Nursing

- 2024-** Co-Director of Human Physiology (HLSC2410) - Fall Semester, School of Nursing  
**2024-** Director of Human Physiology (PHTH7120) - School of Graduate Studies  
**2024-** Director of GI Block for Human Physiology (PHTH7120) - School of Graduate Studies

### Formal Course Responsibilities

- 2003** Physical and Respiratory Therapy, *FAVI – Vitoria, Brazil*.  
Biophysics (Full Course - 80h)
- 2012** Ethics – Graduate School - INT220, *LSUHSC-NO*  
Authorship and Peer Review (1h)
- 2012-2020** Dental Hygiene General and Oral Physiology, *LSUHSC-NO*.  
Endocrine Mechanisms (2h) (2012-2013)  
Oral Physiology and GI Physiology (5h) (2014-2020)  
Renal Physiology (2h) (2016)
- 2012- current** Human Physiology – BSN HS2410 Spring and Fall, *LSUHSC-NO*  
Cardiovascular: Vasculature, Microcirculation & Venous Return 4h)  
(2012-2018)  
GY Physiology: General Concepts in GI Physiology, Motility, Secretions, Digestion & Absorption and Liver (10h) (2017-current)
- 2013** Renal and Vascular Physiology – Physio 220, *LSUHSC-NO*  
Vascular Reactivity (2h)
- 2013-2016** Human Physiology (Physio 6523-1131) – Physician Assistant, *LSUHSC-NO*  
Endocrine: Endocrinology of Pregnancy (1h) (2013)  
Endocrinology of Adipose Tissue (1h) (2013)  
GI Physiology (8h) (2013-2016)
- 2015** Cardiovascular Physiology (Graduate Course – Physio 212), Fall, *LSUHSC-NO*  
Splanchnic Circulation (1h) and Lymph Formation and Flow (1h)
- 2015-2018** Dental General and Oral Physiology, *LSUHSC-NO*  
Cardiovascular: Vasculature and Microcirculation (1h)  
Cardiovascular: Dental Microcirculation and Venous Return (1h)
- 2017-2018** 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)
- 2017-current** Biologic Systems I (INTER-131) – Graduate/Physician Assistant/Physical Therapy Students, Gastrointestinal (GI) Physiology Block Co-director, *LSUHSC-NO*  
GI Physiology (6h) Pulmonary Physiology - 2023 (4h)
- 2017- current** Nursing Pathophysiology, *LSUHSC-NO* –Course Director (Spring) and Course Co-director (Fall and Winter)  
Shock (1h) (2017-2018)  
Gastrointestinal Disorders (1h) (2017-current)  
Pancreatic & Liver Disorders (1h) (2017-current)  
Gut Microbiome (1h) (2017-current)
- 2021- current** IDP Students Professionalism Course – Lab safety and Dress for Success (1h)

### Undergraduate, Medical, or Graduate Students Trained:

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

**Research Advisor (Mentor):**

Matthew Herrera	Master's Student, graduated in May 2020, currently in medical school
Kourtney Weaver	MD/PhD Candidate, July 2022 – May 2025

**Thesis and Dissertation Committees:**

Matthew Herrera	Master's Student, graduated in May 2020, "The
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Kourtney Weaver mechanisms of ethanol-induced lymphatic leakage”  
 MD/PhD Candidate, graduating May 2025,  
 “Immunometabolic consequences of alcohol-induced  
 mesenteric lymphatic dyshomeostasis”

## **RESEARCH AND SCHOLARSHIP**

### **Grants and Contracts:**

#### **Funded**

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)

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)

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)

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:* PI (5% effort)

Academic Career Award (Parent K01)

*Submitted:* June 2017

*Reviewed:* December 2017

*Funding Period:* 07/18 – 06/23 (no-cost extension till 2024)

*Direct Costs:* \$181,000/ year

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

*Role:* PI (75% effort)

### **Recent non-funded applications**

Research Project Grant Program (R01)

*Submitted:* October 2022

*Review date:* February 09, 2023

*Funding Period:* 07/01 – 06/28

*Direct Costs:* \$250,000/ year

*Title:* Mesenteric Adipose Resident Immune Cell Bioenergetics Adaptations: Novel Mechanism of Metabolic Dysregulation in Obesity

*Role:* Contact co-PI (20% effort)

### **Journal Publications:**

#### **Refereed**

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<sup>2+</sup> 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 [Ca<sup>2+</sup>]. *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  $[Ca_{2+}]$  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*. *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/PI 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, Ginaldo 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
27. **Souza-Smith FM**, Molina PE, Maiya R. Chronic Alcohol Feeding Alters Lymph and Plasma Proteome in a Rodent Model. *Accepted Life Sciences Journal*, Aug 2023, 15;327:121818. PMID: 37268288
28. Siggins R, McTerman P, Simon L, **Souza-Smith FM**, Molina PE. Mitochondrial Dysfunction: At the Nexus between Alcohol-Associated Immunometabolic Dysregulation and Tissue Injury. *International Journal of Molecular Sciences*, May 2023, 12;24(10):8650. PMID:37239997

### 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  $Ca^{2+}$  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  $[Ca^{2+}]$ ” 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”, 38<sup>th</sup> RSA Meeting, San Antonio, TX
- 06/26/2016 Repeated Binge-Like Alcohol Intoxication-Induced Metabolic Dysregulation is Adipose Depot-Specific, 39<sup>th</sup> 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 Immunometabolic Dysregulation. AIRIG, Denver, CO
- 10/05/2018 Lymphatic Adipose Crosstalk in Alcohol Immunomodulation. 18<sup>th</sup> 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, 1<sup>st</sup> 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. 11<sup>th</sup> 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 Preclínicas in Havana, Cuba. Sponsored by the American Physiological Society

#### **Research Review Committee:**

- Nov 2021 ADACE Pilot Grant study section at LSUHSC
- Nov 2022 LACaTS Pilot Grant study section at LSUHSC
- Oct 2022 NIH study section, NIDDK, Digestive and Nutrition Physiology and Diseases (DNPD)

#### **Invited Presentations and 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
- 07/18/2023 "Immunometabolic Consequences of Lymphatic Dysfunction: Role of Alcohol Use", Vasculata Meeting 2023, New Orleans, LA

**Editorial Posts and Activities:****Journal Editor or Associate Editor:**

Associate Editor for Life Sciences Journal 2019-2024

**Reviewer and Other 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 19<sup>th</sup> 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.
- Co-Chair of the 2023 The Solomon A. Berson Distinguished Lecture of the APS Endocrinology and Metabolism Section (Berson, NIA, and Mahesh Award) at the ASP Summit, Long Beach, CA

## **SERVICE AND ADMINISTRATION**

### **University/Institutional Service:**

#### **Departmental committees**

- 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
- 2018-present** Member of the Wellbeing Committee at the Physiology Department at LSUHSC
- 2020** Organizer of the Perspectives Against Racism Summer Program at the Physiology Department at LSUHSC
- 2021-present** Member of the Diversity, Equity, and Inclusivity Committee

#### **School committees**

- 2018-present** Member of the Wellness Committee (School of Medicine) at LSUHSC - *co-chair position starting Nov 2022*
- 2022-present** New Student Orientation Committee (School of Graduate Studies) at LSUHSC

#### **Professional society committees**

- 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
- 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
- 2020/21** Organizing committee of the National Hispanic Science Network Conference, 2022, Grand Rapids, MI
- 2021-present** Member of the APS International Committee, 2022-2025

#### **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
    - 2<sup>nd</sup> grade
    - 6<sup>th</sup> grade
- 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
    - 1<sup>st</sup> Grade (host – Flavia M. Souza-Smith)
- 2017** PhUn Week: Healthy Heart
- Marie B. Riviere Elementary School, Metairie, LA; November 03
    - 5<sup>th</sup> Grade (host – Flavia M. Souza-Smith)
- 2019** Greater New Orleans Science and Engineering Fair (GNOSEF)
- Judge. February 20, Loyola University, New Orleans, LA
- 2021** Greater New Orleans Science and Engineering Fair (GNOSEF)
- Judge. February 23, online format
- 2022** Greater New Orleans Science and Engineering Fair (GNOSEF)
- Judge. February 23
- 2023** Greater New Orleans Science and Engineering Fair (GNOSEF)
- Judge. February 22