



## **CURRICULUM VITAE** **Name Liz Simon Peter**

**Current Title:** Associate Professor, Physiology

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**Education:**

**Undergraduate:** 1991-1997: Bachelor of Veterinary Sciences and Animal Husbandry (**BVSc&A.H**), Kerala Agricultural University, India.

**Graduate/Medical** 1997-1999: Master of Veterinary Sciences (**MVSc**), Endocrine Physiology. Kerala Agricultural University, India.  
2001-2005: **Ph.D.**, Endocrine Physiology. Tamilnadu Veterinary and Animal Sciences University, Chennai, India.

**Post-Doctoral Fellowships** 2006-2010: Endocrine Physiology/Stem Cell biology. College of Veterinary Medicine, University of Illinois at Urbana Champaign

**Academic, Professional, and Research Appointments:**

2010-2013: **Assistant Professor**, Department of Biomedical Sciences, College of Veterinary Medicine, Nursing and Allied Health (CVMNAH), Tuskegee University, AL.

2012-2013: **Adjunct faculty (Assistant Professor)**, Department of Pathology, School of Medicine, University of Alabama at Birmingham, AL.

2013- 2016: **Assistant Professor-Research**, Department of Physiology, School of Medicine, Louisiana State University Health Sciences Center, New Orleans, LA

2016-2019: **Assistant Professor**, Department of Physiology, School of Medicine, Louisiana State University Health Sciences Center, New Orleans, LA

2019-Present: **Associate Professor**, Department of Physiology, School of Medicine, Louisiana State University Health Sciences Center, New Orleans, LA

**Membership in Professional Organizations:**

American Physiological Society- Member  
Research Society on Alcoholism - Member  
Association of Women in Science – Member

**Awards and Honors:**

1991-1997: Merit Scholarship for 5 years of BVSc & AH based on GPA, Kerala Agricultural University.  
1997: K. V. Asokan Trust Award for the **best student of the BVSc & AH class of 1997**.

- 1997-1999: **Junior Research Fellowship**, Kerala Agricultural University for Master's Program.  
 1999: Ranked **first in the Master's Program** of the College of Veterinary and Animal Sciences, Kerala, India.
- 2001-2005: **Senior Research Fellowship**, Ph.D., Indian Council of Agricultural Research (ICAR), Government of India.
- 2007-2008: **Billie A. Field Postdoctoral Fellowship**, University of Illinois at Urbana-Champaign, IL.  
 2007: **Constance Campbell Award** for oral presentation at the 29<sup>th</sup> Annual Mini symposium in Reproductive Biology conducted by Center for Reproductive Sciences, Northwestern University, Evanston, IL, October, 2007.
- 2008: **Phi Zeta Research/Literary Award (First place)**. Program of the Phi Zeta Research Day, College of Veterinary Medicine, University of Illinois at Urbana-Champaign, IL, March, 2008.
- 2009: **NIH travel Award** to the Annual Conference of the American Society of Andrology  
 2009: **NIH travel Award** to the Annual Conference of the Endocrine Society  
 2009: **IGB Fellows Symposium Award (First place for poster)**. Program of the 2009 Institute for Genomic Biology Fellows Symposium, University of Illinois at Urbana-Champaign, April, 2009.
- 2011-2012: **Health Disparity Research Training Program (HDRTP) Scholar** coordinated by the Minority Health & Health Disparities Research Center, University of Alabama at Birmingham.
- 2012: **Outstanding Faculty Performance Award for Research**, College of Veterinary Medicine and Allied Health, Tuskegee University, Alabama.
- 2015: **Judy A. Spitzer, PhD, Excellence in Research and Mentoring award**, Department of Physiology, LSUHSC New Orleans.
- 2018: **Faculty Assembly Outstanding Accomplishments by a Junior Faculty Member**, School of Medicine, LSUHSC New Orleans

## **TEACHING EXPERIENCE AND RESPONSIBILITIES**

### **Curriculum Development/Implementation**

**Member** - Curriculum development committee of the DVM program at the College of Veterinary Medicine, University of Illinois at Urbana Champaign. The committee was responsible for redesigning the basic sciences curriculum for the 1<sup>st</sup> year DVM program.

**Member** – Committee for initiation of a graduate program “One Medicine” at Tuskegee University, 2011-2013. The program was to offer opportunities for underserved minorities to obtain a Ph.D. degree. The program blends the “one-medicine-one-health” concept and the ethical principles and approaches that are required to protect underserved communities

### **Formal Course Responsibilities**

- 1999-2000: **Instructor** Didactic lectures in reproductive physiology to 4<sup>th</sup> year veterinary students, College of Veterinary Animal Sciences, Kerala, India. 8/yr, 2 yrs.
- 2006-2010: **Instructor** VM 602 and VM 603 (Structure and function I- Physiology and Anatomy) to 1<sup>st</sup> year DVM students at University of Illinois at Urbana Champaign. These courses include Veterinary Physiology, Anatomy and Histology. Didactic lectures in general physiology and cell signaling 4/yr 2 yrs and gross anatomy laboratory 6h/wk 1 year.
- 2008 **Instructor** in Advanced Endocrinology Seminar Series for graduate students, University of Illinois at Urbana-Champaign. 1/yr, 1 year
- 2010-2013: **Course Director**, Veterinary Physiology PHSI 0340, 0341G, PHSI 0441, PHSI 0441G to DVM and graduate students at the College of Veterinary Medicine, Tuskegee University. Didactic lectures in General Physiology, cardiovascular, GI and Neurophysiology 59/yr,

- 3yrs, Animal labs for cardiovascular physiology and simulation labs for respiratory physiology 4labs/yr, 3yrs
- 2013-2014: **Instructor** INTER 132, PTH 7122 (Graduate students, Physician Assistants and Physical therapists) - Endocrine physiology (10 h lecture/yr) HLSC 3410 (Nursing) – Disorders of the vascular system (1 h lecture/yr) DHY3202 (Dental hygiene) – Cardiovascular physiology (4 h lecture/yr)
- 2014-2015: **Instructor** INTER 132, PTH 7122 (Graduate students, Physician Assistants and Physical therapists) - Endocrine physiology (10 h/yr lecture) HLSC 3410 (Nursing) – Disorders of the vascular system and musculoskeletal disorders (3 h lecture/yr) DHY3202 (Dental hygiene) – Muscle physiology (1 h lecture/yr) PHYSIO 216 Endocrine physiology (Graduate students) (8 lectures/yr)
- 2015-2016: **Instructor** INTER 132, PTH 7122 (Graduate students, Physician Assistants and Physical therapists)- Endocrine physiology (10 h/yr lecture) HLSC 3410 (Nursing) – Disorders of the vascular system and musculoskeletal disorders (3 h lecture/yr) DHY3202 (Dental hygiene) – Muscle physiology (1 h lecture/yr) PHYSIO 216 Endocrine physiology (Graduate students) (8 lectures/yr), INTER121 Cell Biology Adhesion, Intracellular Junctions, and ECM (Graduate students, 2 lectures/yr), Cardiovascular physiology (Graduate students, 2 lectures/yr)
- 2016-2017: **Instructor** INTER 132, PTH 7122 (Graduate students, Physician Assistants and Physical therapists) - Endocrine physiology (10 h/yr lecture), INTER121 Cell Biology Adhesion, Intracellular Junctions, and ECM (Graduate students, 2 lectures/yr), Dental physiology (2lectures/yr). **Course director** Journal club (graduate students, 1h/ week).
- 2017-2018: **Instructor** INTER 132, PTH 7122 (Graduate students, Physician Assistants and Physical therapists) - Endocrine physiology (10 h/yr lecture), INTER121 Cell Biology Adhesion, Intracellular Junctions, and ECM (Graduate students, 2 lectures/yr), Dental physiology- Endocrine physiology (10 lectures/yr). **Course director** Journal club (graduate students, 1h/ week), Interprofessional Education facilitator (6 hours/yr)
- 2018-2019: **Instructor** INTER 132, PTH 7122 (Graduate students, Physician Assistants and Physical therapists) - Endocrine physiology (10 h/yr lecture), INTER121 Cell Biology Adhesion, Intracellular Junctions, and Extracellular matrix (Graduate students, 2 lectures/yr), Dental physiology- Endocrine physiology (10 lectures/yr), Interprofessional Education facilitator (2 hours/yr)
- 2019-2020: **Instructor** INTER 132, PTH 7122 (Graduate students, Physician Assistants and Physical therapists) - Endocrine physiology (10 h/yr lecture), INTER121 Cell Biology Adhesion, Intracellular Junctions, and Extracellular matrix (Graduate students, 2 lectures/yr), Dental physiology- Endocrine physiology (10 lectures/yr).

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

##### **MENTORED STUDENTS**

1. **Delilah Hudson**, MS Mentor, Veterinary Sciences, Tuskegee University (TU). Graduated in Summer 2013.
2. **Stephen Ford**, MD/PhD Co-Mentor, Department of Physiology, LSUHSC, NO. 2014 to 2017.
3. **Katherine Adler**, MS, Mentor, Department of Physiology, LSUHSC, NO. 2017- 2019.

##### **Thesis and Dissertation Committees:**

1. **Samuel Rodriguez**, MS thesis committee member: 2010-2011, MS Veterinary Sciences, TU.
2. **Martha C Graham**, MS thesis committee member: 2010-2012, MS Veterinary Sciences, TU.
3. **Shaniece Theodore**, PhD thesis committee member, 2011-2013 Integrated Biosciences PhD program, TU. Graduated, Summer 2013
4. **John Maxi**, PhD thesis committee member, LSUHSC, 2014-2017

5. **Alan Mouton**, PhD thesis committee member, LSUHSC, 2014-2017
6. **Adrienne McGinn**, PhD thesis committee member, LSUHSC, 2015- Present
7. **Van Ninh**, PhD thesis committee member, LSUHSC, 2015- 2019
8. **Vincent Maffei**, MD PhD thesis committee member, LSUHSC, 2016- 2019
9. **Elia Hajj**, PhD thesis committee member, LSUHSC, 2016- 2018
10. **Jonquil Poret**, PhD thesis committee member, LSUHSC, 2019-Present
11. **Brittany Foret**, MD PhD thesis committee member, LSUHSC, 2019-Present

#### **Post-Doctoral Fellows Trained-**

1. **Dr. Danielle Levitt**- T32 Postdoctoral fellow. 2018-Present

#### **Undergraduate Research Mentoring**

1. Integrative Biosciences Research Experience for Undergraduates mentor– IBS REU Summer internship, (TU), 1 student each in 2011 and 2012.
2. Mentor –MARC (Mentoring for Academic-Research Careers) Scholar, Tuskegee University (TU), 2011.
3. Merit Scholar mentor, (TU) – Summer 2012
4. Summer research program for DVM students, (TU) - 2 students in 2011 and 2 students in 2012 and 1 student in 2013.
5. Summer Training program, LSUHSC-1 undergraduate and 2 high school students in 2014  
K-12 teacher – APS teacher Fellow, Summer 2014 and 2016, 1 undergraduate and 1 high school student in 2015, 1 undergraduate and 1 high school student (1<sup>st</sup> place for high school poster competition) in 2016, 3 high school students (2<sup>nd</sup> place in high school poster competition) in 2017, 1 undergraduate and 1 high school student 2018, 1 medical student and 1 high school student 2019 (2<sup>nd</sup> place in high school poster competition).

### **RESEARCH AND SCHOLARSHIP**

#### **Grants and Contracts:**

##### **Funded**

1K01AA024494-01A1 (**PI- Liz Simon**) 07/05/2016 – 06/30/2021      9 mo DC \$778820

NIH/NIAAA **Role: PI**

Alcohol-induced myomiR dysregulation: mechanisms of impaired skeletal muscle regeneration in SIV/HIV

P602P60AA009803 (**Director- Molina PE**) 12/24/19-11/30/24 1.2 mo DC \$1,500,000

NIH/NIAAA **Role: Co-Investigator**

“Alcohol and Metabolic Dysregulation in PLWH: Mechanisms Underlying Risk for Comorbidities”  
The studies explore the alcohol-mediated mechanisms of metabolic dysregulation in SIV/HIV infection

P60 2P60AA009803 (**Director- Molina PE**) 12/24/19-11/30/24      1.2 mo DC \$1,500,000

NIH/NIAAA **Role: Co-Director**

Experimental and Analytical Core. The Core will coordinate and execute all biospecimen collection and storage and performing bioassays. The Core will also coordinate and execute experimental procedures in the alcohol/SIV preclinical model.

UH2/UH3 1UH2AA026198-01 (**PI Molina PE**) 06/01/2017- 05/31/2022      0.6 mo DC 1,446,260

NIH/NIAAA **Role: Co-Investigator**

Alcohol & Metabolic Comorbidities in PLWHA; Evidence-Driven Interventions

The studies explore whether a higher proportion of people living with HIV and Alcohol use disorder with subclinical fasting dysglycemia will present with impaired oral glucose tolerance and potential skeletal

muscle induced mechanisms. Studies will explore whether aerobic exercise will improve glycemic control.

#### Completed grants

2018 NORC pilot grant (**Multi PIs Flavia Souza-Smith and Liz Simon**) 12/1/2018-11/30/2020

NORC/Pennington Biomedical Research Center **Role: PI**

#### **Mesenteric lymphatic leak and metabolic dysregulation**

The studies explore mechanisms of mesenteric lymphatic leak due to a high fat diet and gonadal hormone loss. The role of 2 microRNAs involved in tight junction regulation of lymphatic endothelial cells will be studied.

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

R01DK126039-01 (Multi PIs Liz Simon and Patricia Molina)

NIH/NIDDK:PI (Submitted October 2019)

#### **Mechanisms of metabolic dysregulation in SIV/HIV: role of adipocyte-immune cell cross talk**

R21AA028574 (Multi PIs Liz Simon and Patricia Molina)

NIH/NIAAA: PI (Submitted November 2019)

#### **Alcohol mediated pancreatic endocrine dysfunction: role of adipose-derived extracellular vesicles**

#### **Journal Publications:**

##### **Refereed**

1. **Simon L**, Vijayakumaran V (2002). Assessment of bacterial load in frozen buck semen. **Indian Journal of Animal Sciences** 72:783-84.
2. **Simon L**, Vijayakumaran V (2003). Effect of refrigeration temperature on bacterial load and quality of buck semen. **The Indian Journal of Animal Reproduction** 24:71-72.
3. **Simon L**, Veerapandian C, Balasubramanian S, Subramanian A (2006). Somatic cell nuclear transfer in buffalos: effect of the fusion and activation protocols and embryo culture system on pre-implantation embryo development. **Reproduction, Fertility and Development** 18:439-45. **PMID:16737637**
4. Cooke PS, Hess RA, **Simon L**, Schlessner HN, Carnes K, Tyagi G, Hofmann M-C, Murphy KM (2006). The transcription factor Ets-Related Molecule ERM is essential for spermatogonial stem cell maintenance and self-renewal. **Animal Reproduction** 3:98-107
5. Sridharan S, **Simon L**, Meling D, Cyr D, Gutstein DE, Fishman GI, Guillou F, Cooke PS (2007). Proliferation of adult Sertoli cells following conditional knockout of the gap junctional protein GJA1 (connexin 43). **Biology of Reproduction** 76:804-12. **PMID:17229929**
6. **Simon L**, Ekman GC, Tyagi G, Hess RA, Murphy KM, Cooke PS (2007). Common and distinct factors regulate expression of mRNA for ETV5 and GDNF, Sertoli cell proteins essential for spermatogonial stem cell maintenance. **Experimental Cell Research** 313: 3090-99. **PMID:17574550**
7. Schlessner HN, **Simon L**, Hofmann M-C, Murphy KM, Hess RA, Cooke PS (2008). Effects of Ets variant gene 5 (ERM) on testis and body growth, time course of spermatogonial stem cell loss and fertility in mice. **Biology of Reproduction** 78: 483-9. **PMID:18032421**. PMC2911230
8. **Simon L**, Spiewak KA, Ekman GC, Kim J, Lydon JP, Bagchi M, Bagchi I, DeMayo FJ, Cooke PS (2009). Stromal progesterone receptors mediate induction of IHH in uterine epithelium and its downstream targets in uterine stroma. **Endocrinology** 150:3871-6. **PMID:19372202**. PMC2717869
9. **Simon L**, Ekman GC, Kostereva N, Zhang Z, Hess R, Hofmann MC, Cooke PS (2009). Direct transdifferentiation of stem/progenitor spermatogonia into reproductive and non-reproductive tissues of all germ layers. **Stem Cells** 27:1666-75. **PMID: 19544441**. PMC2904909

10. Morrow C, Tyagi G, **Simon L**, Carnes K, Murphy K, Cooke PS, Hofmann M-C, Hess RA (2009). Claudin 5 expression in mouse seminiferous epithelium is dependent upon the transcription factor Ets-Variant 5 and contributes to blood-testis barrier function. **Biology of Reproduction** 81:871-9. **PMID: 19571261**. PMC2770019
11. **Simon L**, Hess RA, Cooke PS (2010). Spermatogonial stem cells, in vivo transdifferentiation and human regenerative medicine. **Expert Opinion on Biological Therapy** 10:519-30. **PMID: 20146635**
12. **Simon L**, Ekman GC, Garcia T, Carnes K, Zhang Z, Murphy T, Murphy KM, Hess RA, Cooke PS, Hofmann MC (2010). ETV5 regulates Sertoli cell chemokines involved in mouse stem/progenitor spermatogonia maintenance. **Stem Cells** 28:1882-92. **PMID: 20799334**. PMC3109872
13. **Simon L**, Avery L, Braden TD, Williams CS, Okumu L, Williams JW, Goyal HO (2011). Exposure of neonatal rats to anti-androgens induces penile mal-developments and infertility comparable to those induced by estrogens. **International Journal of Andrology** 35: 364-76. **PMID: 22150386**
14. Nanjappa MK, **Simon L**, Akingbemi BT (2012). The industrial chemical Bisphenol A (BPA) interferes with proliferative activity and development of steroidogenic capacity in rat Leydig cells. **Biology of Reproduction** 86:1-12. **PMID: 22302688**. PMC3364919
15. Okumu LA, Brinton SA, Braden TD, **Simon L**, Goyal HO (2012). Estrogen-Induced Maldevelopment of the Penis Involves Down-Regulation of Myosin Heavy Chain 11 (MYH11) Expression, a Biomarker for Smooth Muscle Cell Differentiation. **Biology of Reproduction** 87:109. **PMID: 22976277**. PMC3509779
16. **Simon L**, Cooke PS, Berry SE (2013) Aorta-Derived Mesoangioblasts Can Be Differentiated into Functional Uterine Epithelium, but Not Prostatic Epithelium or Epidermis, by Instructive Mesenchymes. **Cells Tissues Organs** 198(3):169-78. **PMID: 24192012**
17. Okumu LA, Braden TD, Vail K, **Simon L**, Goyal HO (2013).Low Androgen-Induced Penile Mal-development Involves Altered Gene Expression for Biomarkers for Smooth Muscle Differentiation and a Key Enzyme Regulating Cavernous Smooth Muscle Cell Tone. **Journal of Urology** **PMID: 24316094**.
18. Napier ID, **Simon L**, Perry D, Cooke PS, Stocco DM, Sephehr E, Doerge DR, Kempainen BW, Morrison EE, Akingbemi BT (2014). Testicular Development in Male Rats Is Sensitive to a Soy-Based Diet in the Neonatal Period. **Biology of Reproduction** Feb 27;90 (2):40. **PMID 24451983**
19. **Simon L**, LeCapitaine N, Berner P, Stouwe CV Mussell JC, Allerton TD, Primeaux SD, Dufour J, Nelson S, Bagby GJ, Cefalu W and Molina PE (2014). Chronic binge alcohol consumption alters myogenic gene expression and reduces in vitro myogenic differentiation potential of myoblasts from rhesus macaques. **American Journal of Physiology – Regulatory, Comparative and Integrative Physiology**. **PMID 24671243**
20. Dodd T, **Simon L**, LeCapitaine NJ, Mussell J, Zabaleta J, Berner P, Ford S, Dufour J, Bagby GJ, Nelson S, Molina PE (2014). Chronic binge alcohol administration accentuates pro-fibrotic and inflammatory gene expression in the skeletal muscle of simian immunodeficiency virus-infected macaques. **Alcohol Clinical Experimental Research** Nov; 38(11):2697-706.**PMID 25421506**.
21. Molina PE, Amedee AM, Winsauer P, Nelson S, Bagby G, **Simon L**. (2015). Behavioral, Metabolic, and Immune Consequences of Chronic Alcohol or Cannabinoids on HIV/AIDS: Studies in the Non-Human Primate SIV Model. **J Neuroimmune Pharmacology**. **10(2):217-232** **PMCID: PMC4470723**
22. Cooke PS, **Simon L**, Nanjappa MK, Medrano TI, Berry SE. (2015). Plasticity of spermatogonial stem cells. **Asian J Andrology**. May-Jun;17(3):355-359 **PMCID: PMC4430932**
23. **Simon L**, Song K, Stouwe CV, Hollenbach A, Amedee A, Mohan M, Winsauer P, Molina PE (2015).  $\Delta$ 9-tetrahydrocannabinol ( $\Delta$ 9-THC) promotes neuroimmune-modulatory microRNA profile

- in striatum of simian immunodeficiency virus (SIV)-infected macaques. **J Neuroimmune Pharmacology** 11(1):192-213 **PMID: 26607731**
24. **Simon L**, Hollenbach AD, Zabaleta J and Molina PE (2015). Chronic binge alcohol administration dysregulates global regulatory gene networks associated with skeletal muscle wasting in simian immunodeficiency virus-infected macaques. **BMC Genomics** Dec 23;16(1):1097 **PMCID: PMC4690320**
  25. Ford SM Jr, **Simon L**, Stouwe CV, Allerton T, Mercante DE, Byerley LO, Dufour JP, Bagby GJ, Nelson S, Molina PE (2016). Chronic Binge Alcohol Administration Impairs Glucose-Insulin Dynamics and Decreases Adiponectin in Asymptomatic Simian Immunodeficiency Virus-Infected Macaques. **American Journal of Physiology – Regulatory, Comparative and Integrative Physiology** **PMID: 27605560**
  26. Duplanty AA, **Simon L**, Molina PE. (2017). Chronic Binge Alcohol-Induced Dysregulation of Mitochondrial-Related Genes in Skeletal Muscle of Simian Immunodeficiency Virus-Infected Rhesus Macaques at End-Stage Disease. **Alcohol Alcohol.** 52(3): 298-304. **PMID: 28069597**
  27. Souza-Smith F. M, Ford S. M Jr, **Simon L**, Molina P. E (2017). Repeated Binge-Like Alcohol Intoxication: Depot-Specific Adipose Tissue Immuno-Metabolic Dysregulation. **Shock.** 48(2):243-250. **PMID: 28125531**
  28. **Simon L**, Ford SM Jr, Song K, Berner P, Vande Stouwe C, Nelson S, Bagby G. J, Molina P. E (2017). Decreased myoblast differentiation in chronic binge alcohol and antiretroviral therapy administered simian immunodeficiency virus-infected macaques: role of miR-206. **American Journal of Physiology – Regulatory, Comparative and Integrative Physiology.** 313 (3): R240-R250. **PMID:28637658, Corresponding author.**
  29. **Simon L**, Siggins R, Winsauer P, Brashear M, Ferguson T, Mercante D, Song K, Vande Stouwe C, Nelson S, Bagby GJ, Amedee AM, Molina PE (2017). Simian immunodeficiency virus infection increases blood ethanol concentration duration after both acute and chronic administration. **AIDS Res Hum Retroviruses.** **PMID: 29037050**
  30. **Simon L**, Jolley SE, Molina PE (2018). Alcoholic myopathy: Pathophysiologic mechanisms and clinical implications. **Alcohol Research** 38 (2): 207-217. **PMID:29546271**
  31. Duplanty AA, Siggins RW, Allerton T, **Simon L**, Molina PE. (2018). Myoblast mitochondrial respiration is decreased in chronic binge alcohol administered simian immunodeficiency virus-infected antiretroviral-treated rhesus macaques. **Physiological Reports.** **PMCID:5835494, Corresponding author.**
  32. Molina PE, **Simon L**, Amedee AM, Welsh DA, Ferguson TA (2018). Impact of Alcohol on HIV Disease Pathogenesis, Comorbidities and Aging: Integrating Preclinical and Clinical Findings. **Alcohol Alcohol.** **PMID 29850892**
  33. Ford SM Jr, **Simon L** Berner P, Cook G, Vande Stouwe C, Dufour JP, Bagby G. J, Nelson S, Molina P. E (2018). Differential contribution of chronic binge alcohol and antiretroviral therapy to metabolic dysregulation in SIV-infected male macaques. **American Journal of Physiology-Endocrinology and Metabolism.** **PMID 30040479, Co-first author.**
  34. Ferguson T. F, Rosen E, Carr R, Brashear M, **Simon L**, Theall K. P, Ronis M. J, Welsh D. A, Molina P. E (2019). Associations of Liver Disease with Alcohol Use among People Living with HIV and the Role of Hepatitis C: The New Orleans Alcohol Use in HIV Study. **Alcohol Alcohol** **PMID 31812989**
  35. Levitt D.E, Adler K.A, **Simon L** (2019). HEMA 3 staining: A simple alternative for the assessment of myoblast differentiation. **Current Protocols Stem Cell Biology.** **PMID: 31756292**
  36. Souza-Smith F. M, **Simon L**, Siggins R, Molina P. E (2019). Alcohol-Induced Mesenteric Lymphatic Permeability: Link to Immunometabolic Modulation of Perilymphatic Adipose Tissue. **International Journal of Molecular Sciences.** **PMID 31443389.**

37. Adler K.A, Molina P. E, **Simon L** (2019). Epigenomic mechanisms of alcohol-induced impaired differentiation of skeletal muscle stem cells; role of Class IIA histone deacetylases. **Physiological Genomics. PMID 31398085.**
38. Maxi J.K, Mercante D, Foret B, Oberhelman S, Ferguson T. F, Bagby G. J, Nelson S, Amedee A. M. Edwards S, **Simon L**, Molina P. E (2019). Chronic Binge Alcohol-Associated Differential Brain Region Modulation of Growth Factor Signaling Pathways and Neuroinflammation in Simian Immunodeficiency Virus-Infected Male Macaques. **Alcohol Alcohol PMID 31322648.**
39. Welsh D. A, Ferguson T. F, Theall K. P, **Simon L**, Amedee A, Siggins R. W, Nelson S, Brashear M. Mercante D, Molina P. E (2019). The New Orleans Alcohol Use in HIV Study: Launching a Translational Investigation of the Interaction of Alcohol Use with Biological and Socioenvironmental Risk Factors for Multimorbidity in People Living with HIV. *Alcohol Clinical and Experimental Research.* PMID 30748025.
40. Levitt DE, Yeh AY, Prendergast MJ, Jr RGB, Adler KA, Cook G, Molina PE, **Simon L** (2020). Chronic Alcohol Dysregulates Skeletal Muscle Myogenic Gene Expression after Hind Limb Immobilization in Female Rats. **Biomolecules. PMID: 32178412**
41. Rasineni K, Srinivasan MP, Balamurugan AN, Kaphalia BS, Wang S, Ding WX, Pandol SJ, Lugea A, **Simon L**, Molina PE, Gao P, Casey CA, Osna NA, Kharbanda KK. (2020). Recent Advances in Understanding the Complexity of Alcohol-Induced Pancreatic Dysfunction and Pancreatitis Development. **Biomolecules. PMID: 32349207**
42. Ferguson TF, Rosen E, Carr R, Brashear M, **Simon L**, Theall KP, Ronis MJ, Welsh DA, Molina PE. (2020). Associations of Liver Disease with Alcohol Use among People Living with HIV and the Role of Hepatitis C: The New Orleans Alcohol Use in HIV Study. **Alcohol Alcohol. PMID: 31812989**
43. **Simon L**, Ferguson T, Vande Stouwe C, Brashear M, Primeaux SD, Theall KP, Welsh DA, Molina PE (2020). Prevalence of Insulin Resistance in Adults Living with HIV: Implications of Alcohol Use. **AIDS Res Hum Retroviruses. PMID: 32449647**

#### Book Chapters:

1. Cooke PS, Gore AC, Crews D, **Simon L**, Cimafranca MA (2010). Environmental endocrine disruptors and male reproductive toxicology. **Comprehensive Toxicology, 2<sup>nd</sup> edition.** Hoyer P and Richburg J (eds.), Elsevier Press, Oxford, England.
2. **Simon L**, Hofmann MC, Cooke PS (2012). Spermatogonial stem cells – an alternate source of pluripotent stem cells for regenerative medicine. **Tissue Regeneration: From Basic Biology to Clinical Application**, Davies J (eds), Intech, Rijeka, Croatia.
3. Cooke PS, **Simon L**, Roberts SM, Denslow ND (2013). Environmental endocrine disruptors. **Handbook of Toxicological Pathology, 3<sup>rd</sup> edition.** Haschek-Hock WM, Rousseaux CG, and Wallig MA (eds), Academic Press Inc., San Diego, CA

#### Published Abstracts: past 5 years

##### International

1. **Simon L**, Molina P. E. Skeletal muscle and adipose mechanisms contributing to metabolic dysfunction in chronic alcohol administered simian immunodeficiency virus-infected male macaques. *Physiology 2016, Program of The Physiological Society and The American Physiological Society, Dublin, July, 2016*
2. Molina PE, **Simon L**, Welsh D, Amedee A, Siggins R, Ferguson T, Brashear M, Primeaux S. Alcohol-SIV/HIV-ART interactions & resulting comorbidities. *International Society for Biomedical Research on Alcoholism, Kyoto, Japan, 2018*

##### National

3. **Simon L**, Mercante D, Winsauer P, Amedee A, Molina PE. Simian immunodeficiency virus infection prolongs the time of increased blood alcohol concentration after acute binge alcohol



- administration. *Program of the 39<sup>th</sup> Annual Meeting of the Research Society on Alcoholism*, June 2016.
4. Middleton J, **Simon L**, Maxi J, Schumacher J, Edwards S, Birke L, Molina PE. Physiological synaptic changes in the caudate nucleus of acute-alcohol administered SIV-infected macaques. *Program of the 39<sup>th</sup> Annual Meeting of the Research Society on Alcoholism*, June 2016.
  5. **Simon L**, Ray I, Song K, Molina PE. Expression of neuromuscular junction genes in simian immunodeficiency virus infection: impact of chronic binge alcohol and antiretroviral therapy. *Program of Experimental Biology*, April 20-22, 2017.
  6. Duplanty AA, **Simon L**, Molina PE. Chronic Binge Alcohol-Induced Dysregulation of Mitochondrial-Related Genes in Skeletal Muscle of Simian Immunodeficiency Virus-Infected Rhesus Macaques at End-Stage Disease. *Program of Experimental Biology*, April 20-22, 2017.
  7. Ford Jr SM, Nelson S, Bagby GJ, **Simon L**, Molina PE. Anti-retroviral therapy increases hepatic gluconeogenic and lipogenic enzyme expression but does not alter expression of insulin signaling cascade proteins in chronic binge alcohol administered SIV-infected rhesus macaques. *Program of Experimental Biology*, April 20-22, 2017.
  8. **Simon L**. Alcohol-induced impaired skeletal muscle regeneration: role of myomiRs. *Program of the 40<sup>th</sup> Annual Meeting of the Research Society on Alcoholism*, June 2017.
  9. Ferguson T, **Simon L**, Brashear M, Mercante D, Parsons C, Theall K, Welsh D, Molina P.E. Chronic hazardous alcohol use; role in HIV-associated metabolic comorbidities. *Program of the 40<sup>th</sup> Annual Meeting of the Research Society on Alcoholism*, June 2017.
  10. Jolley SE, Lammi MR, Stender SR, Okpechi SC, Boulares AH, DeBoisblanc BP, Molina PE, **Simon L**. Exercise-induced changes in muscle-specific microRNA expression in COPD patients. *Program of the Annual Meeting of the American Thoracic Society*, May 19-24, 2017.
  11. Jolley SE, DeBoisblanc BP, **Simon L**, Molina PE, Hough CL. Relationship between pre-hospital alcohol use and presence of ICU-acquired neuromuscular dysfunction. *Program of the annual meeting of the Association for Clinical and Translational Science*, April 19-21, 2017.
  12. Edwards S, Yeh AY, Molina PE, **Simon L**. Animal model of combined alcoholic neuropathy and complex regional pain syndrome: additive effects on hyperalgesia in female rats. *Program of the 41<sup>st</sup> Annual Meeting of the Research Society on Alcoholism*, June 2018.
  13. **Simon L**, Yeh AY, Molina PE. Chronic alcohol induced increase in TGF- $\beta$ 1 impairs skeletal muscle recovery after disuse atrophy in rodents. *Program of the 41<sup>st</sup> Annual Meeting of the Research Society on Alcoholism*, June 2018.
  14. Wills TA, Middleton JW, Carzoli, KL, **Simon L**, Molina PE, Edwards S. Impaired novel object recognition and altered neuronal excitability in chronic binge alcohol-administered, SIV-infected female rhesus macaques. *Program of the 41<sup>st</sup> Annual Meeting of the Research Society on Alcoholism*, June 2018.
  15. Ferguson TF, Carr R, Ronis MJ, **Simon L**, Brashear MM, Siggins RW, Welsh DA, Molina PE. Increased burden of liver disease in people living with HIV: hazardous alcohol use. *Program of the 41<sup>st</sup> Annual Meeting of the Research Society on Alcoholism*, June 2018.
  16. **Simon L**, Ferguson TF, Brashear MM, Primeaux S, Mercante D, Welsh DA, Molina PE. Chronic hazardous alcohol use in people living with HIV: increased prevalence of insulin resistance. Primeaux S, Brashear M. M, Ferguson T.F, Yeh A, Levitt D, **Simon L**, Molina P. E..
  17. Ferguson TF, **Simon L** Brashear MM, Stouwe-CV, Primeaux S, Mercante D, Theall K, Welsh DA, Molina PE. Prevalence of Insulin Resistance Risk in Adults Living with HIV: impact of alcohol use. *Program of the Network of Minority Health Research Investigators (NMRI) South Regional Workshop in Nashville, TN, November 2018*
  18. Poret J, **Simon L**, Ferguson TF, Brashear MM, Welsh DA, Molina PE "Oxidative stress correlates with alcohol consumption in people living with HIV (PLWH). *Program of the Network of Minority Health Research Investigators (NMRI) South Regional Workshop in Nashville, TN, November 2018*

19. **Simon L**, Adler K, Molina PE. Alcohol-mediated impairment of muscle miR-206 expression in SIV-infected macaques: sex as an effect modifier. *Program of 2019 Gordon research Conference: Inflammation and Cell Death: Mechanisms of Tissue Injury by Alcohol, Ventura, CA, March 2019.*
20. **Simon L**, Adler K, Molina PE. Circulating muscle-enriched microRNA expression correlates with myogenic gene expression in chronic alcohol administered SIV-infected macaques. *Program of Experimental Biology, Orlando, FL, 2019.*
21. **Simon L**, Yeh AY, Adler K. A, Edwards E, Molina PE. Impaired recovery following hind limb immobilization: alcohol-mediated mechanisms. *Program of the Pan-American Congress of Physiological Sciences, May 2019.*
22. Primeaux S, Brashear M. M, Ferguson T.F, Yeh A, Levitt D, **Simon L**, Molina P. E. Unhealthy alcohol use is associated with a higher prevalence of dysglycemia in Persons Living with HIV. *Program of Experimental Biology, San Diego, 2020.*
23. Levitt D. E, **Simon L**, Molina P. E. Chronic alcohol impairs myoblast mitochondrial metabolic function and gene expression. *Program of Experimental Biology, San Diego, 2020.*
24. **Simon L** Levitt D, Ferguson T.F, Lin H, Brashear M. M, Primeaux S, Welsh D. A, Molina P. E. Factors influencing metabolic homeostasis in persons living with HIV: implications of alcohol use. *Program of the 43rd Annual Meeting of the Research Society on Alcoholism, June 2020.*
25. Molina P. E, **Simon L**, Levitt D. E, Catinis A, Amedee A, Siggins R. W. Alcohol-associated metabolic homeostasis; role in enhances viral pathogenesis. *Program of the 43rd Annual Meeting of the Research Society on Alcoholism, June 2020.*
26. Levitt D. E, Adler K. A, **Simon L**, Molina P. E. Mitochondrial dysfunction: key role in myopathy associated with unhealthy alcohol use. *Program of the 43rd Annual Meeting of the Research Society on Alcoholism, June 2020.*
27. Poret J, **Simon L**, Molina P. E. Chronic binge alcohol and gonadal hormone loss mediate adipose tissue metabolic maladaptations. *Program of the 43rd Annual Meeting of the Research Society on Alcoholism, June 2020.*

### Local

1. Adler k, Song K, Molina PE, **Simon L**. Chronic binge alcohol and simian immunodeficiency virus infection dysregulates histone deacetylase expression in myoblasts and skeletal muscle of rhesus macaques. Graduate student Research Day, LSUHSC NO, 2017.
2. Yeh A, Molina PE, **Simon L**. Chronic alcohol impairs skeletal muscle recovery after disuse atrophy. Delta Omega Research Day, School of Public Health, LSUHSC-NO, 2018
3. Natalie Raia, Yeh A, Nguyen, Souza-Smith F, Molina PE **Simon L**. Gonadal hormone loss impairs skeletal muscle insulin signaling. *Summer Research Day, LSUHSC NO, 2018*
4. Cook G, Adler K, Molina PE, Edwards, S, **Simon L**. Alcohol and gonadal hormone loss delay regeneration after muscle disuse atrophy. *Summer Research Day, LSUHSC NO, 2018*
5. Prendergast M, Levitt D. E, Yeh A, Souza-Smith F, Molina PE, **Simon L**. Alcohol-mediated mechanisms of impaired muscle recovery in a rodent model of hind limb immobilization. Graduate Student Research Day, LSUHSC NO, 2019.
6. Bourgeois B, Simkin J, Marrero L, Dasa V, Molina P.E, **Simon L**. Osteoarthritis severity is associated with increased articularis genu pain receptor expression. Medical Student Research Day, LSUHSC NO, 2019.

### Research Review Committee:

Alcohol and Drug Abuse Center of Excellence, LSUHSC, pilot grant reviewer, 2014  
 SOM Internal Grant Review, 2016 – Adhoc reviewer  
 Louisiana Biomedical Collaborative Research (LBCR) Reviewer, 2018

### Scientific Presentations:

## National

1. **Simon L.** Mechanisms underlying decreased regeneration potential - Alcohol as an accelerator of chronological age. *Program of Experimental Biology 2016*, Presidential symposium.
2. **Simon L.** Metabolic Comorbidities of Alcohol and SIV/HIV. *Program of Experimental Biology 2018*, AFMR symposium on Bench to Bedside Approaches to Human Disease.
3. **Simon L.** Impact of impaired stem cell differentiation on alcohol-induced muscle wasting. *Program of Experimental Biology 2018*. Symposium on “Mechanisms underlying skeletal muscle adaptation in health and disease”
4. **Simon L.**, Alcohol mediated impaired recovery following muscle disuse atrophy -influence of sex. in Symposium on Sex-dependent alcohol associated comorbidities. *Program of the 41<sup>st</sup> Research Society on Alcoholism 2018*. **Chair of symposium**
5. **Simon L.** Chronic alcohol and HIV contributes to metabolic dysregulation: impact of impaired insulin secretion. *Program of the 42<sup>nd</sup> Research Society on Alcoholism 2019*.

## Local

1. **Simon L.** Epigenomic mechanisms of alcohol-induced impaired muscle regeneration. Genetics Seminar Series, 2018, LSUHSC-NO
2. **Simon L.** Epigenomic mechanisms of alcohol-mediated impaired muscle function. Pharmacology Seminar Series, Tulane School of Medicine, New Orleans, September, 2019.

## Editorial Posts and Activities:

**Associate editor-** Biomedicine & Pharmacotherapy

**Editorial Board-** Physiological Genomics

**Reviewer-** Alcohol, Alcohol Clinical Experimental Research, Alcohol and alcoholism, Life Sciences, Physiological Genomics

## SERVICE ACTIVITIES

### University/Institutional Service:

#### Departmental committees:

- Faculty Search Committee, 2018-Present
- Wellness Committee, 2018-Present
- Graduate Student Committee, 2019-Present

#### School committees:

- Committee on Women’s Affairs (2014-Present)
- Mentoring committee of IDP Master’s students (2018-Present)
- Association of Women in Science (2014-Present)

### National service

**Professional society committees: Animal Care and Experimentation (ACE) Committee,** American Physiological Society 2017-2019. Address issues impacting research and teaching involving animals.

**Awards Committee,** American Physiological Society 2021-2023

### Administrative Responsibilities:

**LSUHSC:** 2015, 2016, 2017 Graduate school research day- judge

**Community Service Activities:** New Orleans Science Fair, Judge – 2016, 2017, 2018  
American Physiological Society PhUN event- Lusher High School, New Orleans, 2017 and 2018