



CURRICULUM VITAE

Robert Wade Siggins II, Ph.D.

Current Title: Associate Professor

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Education:

Undergraduate: 1995-1999; Bachelor of Arts in History and Bachelor of Science in Biological Sciences, Molecular Biology Emphasis, Chemistry Minor, University of Southern Mississippi, Hattiesburg, MS

Graduate: 2002-2006; Doctor of Philosophy in Physiology Louisiana State University Health Sciences Center, New Orleans, LA

Postdoctoral Fellowships: 2006-2007; Cardiovascular Research Center, New York Medical College, Valhalla, NY

2007-2010; Comprehensive Alcohol Research Center, Department of Physiology Louisiana State University Health Sciences Center, New Orleans, LA

Academic, Professional, and Research Appointments:

2010-2013 **Instructor**, Department of Physiology, Louisiana State University Health Sciences Center, New Orleans, LA

2013-2016 **Assistant Professor-Tenure Track**, Department of Physiology, Louisiana State University Health Sciences Center, New Orleans, LA

2016-2023 **Assistant Professor-Research Track**, Department of Physiology, Louisiana State University Health Sciences Center, New Orleans, LA

2023-present **Associate Professor-Research Track**, Department of Physiology, Louisiana State University Health Sciences Center, New Orleans, LA

Membership in Professional Organizations:

2003-2004 New Orleans Public Schools Science Partnership
 2008-2009 American Federation for Medical Research
 2009-2014 American Association for the Advancement of Science
 2009-present Research Society on Alcoholism
 2009 NIAAA Alcohol Trainee Workshop, Program Committee Member
 2011-present American Physiological Society

Awards and Honors:

1995-1999 Sam E Woods Presidential Scholar, University of Southern Mississippi
 1995-1998 Dean's List
 1998-1999 President's List
 1999 Magna Cum Laude, University of Southern Mississippi
 2008 American Federation for Medical Research, SAFMR SSCI Trainee Award
 2009 Junior Investigator Award, Research Society on Alcoholism
 2009 Travel Award, RSA/ISBRA Satellite Meeting
 2009 Travel Award, Alcohol and Immunology Research Interest Group Meeting
 2010 Junior Investigator Award, Research Society on Alcoholism

TEACHING EXPERIENCE AND RESPONSIBILITIES (2008-Present)

Teaching is a major activity in the Department of Physiology, which conducts courses across all the schools at LSUHSC-NO. As a physiologist by training, I am capable of teaching all aspects of physiology to multiple audiences. My teaching activities range from basic physiology for the dental hygiene and nursing programs, to more advanced physiology for the Doctor of Dental Surgery and Medical Students. Being a Full Member of the Graduate Faculty, I also lecture on a variety of subjects including cell biology and experimental methods for graduate students. One course, for which I serve as course director is Perspectives on Alcohol Research (PAR; PHYSIO289). This course is an integral component for the Biomedical Alcohol Research Training Program (T32 AA07577), and it serves as a primary training component for conveying general

knowledge regarding alcohol research that all researchers in this field should have, but don't necessarily receive in their specialized laboratory environment. Additionally, this course bridges the two important aspects of teaching: didactic lecture and mentoring. Apart from didactic coursework, I have also mentored or co-mentored trainees across the entire educational gamut from high school students to postdoctoral fellows.

Formal Course Responsibilities

Courses Directed or Co-directed:

2008-present	Mentor and Course Director (2015-present) , PHYSIO 289 Perspectives on Alcohol Research (32 contact hours / Fall and Spring semesters)
2010-present	Lecturer and Course Director (2015-2017) , DHY 3202 General and Oral Physiology for Dental Hygiene (2-32 contact hours / Spring semester)
2011- present	Lecturer and Course Co-director (2012-2013) , HLSC 3410 Nursing Pathophysiology (2-6 contact hours / Fall and Spring semester)
2012-present	Lecturer and Section Director for Gastrointestinal Physiology (2012-2023) , PHTH 7120 Physiological sciences/Biological systems (14 contact hours / Spring semester)
2014	Course Director and Lecturer , PHYSIO 289 Modern Breakthroughs in Biomedical Research: A Focus on New Techniques and Technologies (16 contact hours / Summer semester)
2015- present	Lecturer and Course Co-director (2016-present) , DENT 1115 Human physiology for dental students (10-20 contact hours / Spring semester)

Medical Courses

2018-present	Lecturer , PHYSIO 100 Medical Physiology (10 contact hours / Spring semester)
2018-present	Lecturer , MCLIN 237 Disease and Therapy of the Gastrointestinal System (1.5 contact hours / Spring semester)
2023-present	Lecturer and Course Co-director , PHYSIO 110 Experimental Design & Analysis (8 contact hours / Spring semester)

Graduate Courses

2008	Invited Moderator , Extremes in Physiology (2 contact hours / Summer semester)
2008	Lecturer , PHYSIO 212 Cardiovascular Physiology (2 contact hours / Fall semester)

- 2008 **Lecturer**, Theory and Application of Cutting-edge Technology for Biomedical Research (3 contact hours / Summer semester)
- 2018-present **Lecturer**, INTER 122 Cell and Molecular Biology (2.5 contact hours / year)
- 2021-present **Lecturer**, INTER200 Professionalism in Science (1 contact hour / year)

Other Courses

- 2004-present **Lecturer**, HLSC 2410 Nursing Physiology (2-8 contact hours / Fall and Spring semester)

Departmental/Interdisciplinary Teaching Conferences

- 2019 **Course director**, Physiology journal club (16 contact hours / Spring semester)

Undergraduate, Medical, and Graduate Students Trained:

Served as Major Advisor:

- 2012 Jennifer Ramsey, Ph.D. Candidate, Project: "Chronic Alcohol Administration Disrupts Bone Marrow Mesenchymal Stem Cell Differentiation"
- 2012-2013 Garland Michael Upchurch, M.D./Ph.D. Candidate, Project: "Alcohol Disrupts NOTCH-dependent Dendropoiesis"
- 2014 Linda Li, High School, Project: "Antiretroviral Therapy Attenuates Dysregulated Hematopoiesis Caused by Chronic Alcohol Administration and SIV Infection in Rhesus Macaques"
- 2014 Daniel Martinez, Ph.D. Candidate, Project: "Chronic Alcohol Enhances DNMT-3a and -3b Activity *In vitro* and *In vivo*"
- 2015 Joseph Bradford, Jr., Undergraduate, Project: "Chronic Alcohol Alters DNMT Activity in Mesenchymal Stromal Cells"
- 2015-2017 Domonique Smith, Masters Candidate, Project: "Chronic Alcohol Alters DNMT Activity in Mesenchymal Stromal Cells"
- 2016 Longsha Liu, High School, Project: "Effect of Chronic In Vitro Alcohol on Immunosenescence in CD8 T Lymphocytes"
- 2019 Shekinah Hernandez, Postbaccalaureate Research Education Program (PREP) Scholar, Project: "Senescent T Cells Display Deficient Activation-Induced Cell Death (AICD)"
- 2019 Johnathan Cuccia, BS Bioengineering/Medical Student, Project: "Measuring the Phenotypic Changes in CD8+ T-cells using Activation-Induced Cell Death"

- 2019 Steven Do, Medical Student, Project: "Senescent CD8+ T-cells Produce a Pro-inflammatory Senescence-associated Secretory Phenotype"
- 2021 Nabil Esajee, Medical Student, Project: "Senescent T Cells Display Deficient Activation-Induced Cell Death (AICD)"

Served as Co-mentor:

- 2011-2012 Valerie Piet, Ph.D. Candidate, Project: "The Effects of Simian Immunodeficiency Virus Proteins and Alcohol on Bone Marrow Mesenchymal Stem Cell Differentiation Potential"
- 2012 Andrew Prince, Undergraduate, Project: "Alcohol and SIV Promote Bone Marrow Mesenchymal Stem Cell Adipogenesis"
- 2021 Isabella Welsh, Undergraduate, Project: "Impact of Excess Lipids on Naïve CD4 T Cell Activation and Differentiation"
- 2021-2022 Kelly Lozano, PREP Scholar, Project: "Tissue Senescent Cell Accumulation and Viral Loads in SIV-Infected Female Rhesus Macaques"
- 2023 Charlotte Pearson, Medical Student, Project: Chronic Binge Alcohol Increases Inflammatory Death Pathway Activation In Senescent CD8+ T Cells

Thesis and Dissertation Committees:

2014-2017	Stephen Ford	Physiology	MD/PhD Candidate
2015-2018	Matthew Dean	Genetics	PhD Candidate
2015-2018	Alan Mouton	Physiology	PhD Candidate
2016-2018	Rafiq Nabi	MIP*	PhD Candidate
2016-2018	Domonique Smith	Physiology	Masters Candidate (Major Advisor)
2017-2018	Katie Adler	Physiology	Masters Candidate
2018-2018	Kyle Meredith	Pharmacology	Masters Candidate
2019-2021	Krystal Belmonte	Physiology	PhD Candidate
2019-present	Jonquil Poret	Physiology	PhD Candidate
2019-2023	Caleb Ardizzone	MIP*	PhD Candidate
2020-present	Justin Smith	MIP*	PhD Candidate
2021-present	Brianna Bourgeois	Physiology	MD/PhD Candidate
2022-present	Joshua Edavettal	Physiology	MD/PhD Candidate
2022-present	Kourtney Weaver	Physiology	MD/PhD Candidate

***MIP = Microbiology, Parasitology, and Immunology**

RESEARCH AND SCHOLARSHIP

Grants and Contracts:

Funded applications:

- **K99AA020312** (NIH/NIAAA). *Alcohol-induced Osteoimmunopathies: A Unifying Explanatory Mechanism*. **03/01/2011-08/31/2013**. Role: Principal investigator (PI). Total Direct Costs (DC): \$221,496
- **K99AA020312 Supplement** (NIH/NIAAA). *Necessary equipment supplement*. **07/26/2012**. Role: Principal investigator (PI). Total DC: \$27,850
- **R00AA020312** (NIH/NIAAA). *Alcohol-induced Osteoimmunopathies: A Unifying Explanatory Mechanism*. **09/01/2013-08/31/2017**. Role: Principal investigator. Total DC: \$518,697
- **P60AA009803** (NIH/NIAAA). *LSUHSC-NO Comprehensive Alcohol-HIV/AIDS Research Center*. **12/01/2014-11/30/2019**. Roles: Co-I (RC3); Co-director (Analytical Core). DC: \$1,800,000
- **Pilot Grant** (Alcohol and Drug Abuse Center of Excellence, LSUHSC-NO). *Molecular Mechanisms Underlying Ethanol Stimulated B Cell Differentiation in Alcoholic Liver Disease*. **06/01/2015-05/31/2016**. Role: Co-PI. Budget: \$15,000.
- **UH2AA026226** (NIH/NIAAA) *Precision Medicine Approaches for Alcohol- and HIV-Associated Dysbiosis, Immune Activation, and Cardiometabolic Syndrome* **09/15/2017-08/31/2019**. Role: Co-investigator (Co-I). Total DC: \$200,750
- **U54GM104940** (LA CaTS Pilot Grant). *Alcohol Use in People Living with HIV: Impact on Mitochondrial DNA Damage and T-cell Immunosenescence*. **12/04/2018-06/30/2020**. Role: PI. Budget: \$50,000
- **R21AA027199** (NIH/NIAAA). *Alcohol-induced Dysbiosis and HIV-associated Pneumonia*. **09/01/2019-08/31/2021**. Role: Co-I. DC: \$211,313
- **Medical Research Pilot Grant** (The Charles and Elizabeth Wetmore Fund). *Chronic Suppurative Bronchiectasis, Microbiota-Host Interactions, and Precocious Aging*. **07/01/2022-06/30/2023**. Role: Co-I. DC: \$75,000
- **P60AA009803** (NIH/NIAAA). *LSUHSC-NO Comprehensive Alcohol-HIV/AIDS Research Center*. **12/01/2019-11/30/2024**. Roles: Co-I (RC3); Co-associate Director (Analytical Core). DC: \$1,500,000

Non-funded applications (last three years):

- **R01 HL169685** (NIH/NHLBI). *Role of heparan sulfate 6-O-endosulfatases in myelopoiesis*. **07/01/2023-06/30/2026**. Role: Co-PI. DC: \$600,000

- **P01AA029549** (NIH/NIAAA). *Microbiome Targeted Therapeutics for Alcohol- and HIV-related Comorbidities*. **06/01/2021-05/31/2026**. Role: Co-1 (RC1). DC: \$161,039

Journal Publications:

Refereed (Published)

1. Bearzi C, Rota M, Hosoda T, Tillmanns J, Nascimbene A, DeAngelis A, Yasuzawa-Amano S, Trofimova I, **Siggins RW**, LeCapitaine N, Cascapera S, Beltrami AP, D'Alessandro DA, Zias E, Quaini F, Urbanek K, Michler RE, Bolli R, Kajstura J, Leri A, Anversa P. Human Cardiac Stem Cells. *Proceedings of the National Academy of Sciences*, 2007, 104(35): 14068-14073. doi: 10.1073/pnas.0706760104. PMID: 17709737
2. Tillmanns J, Rota M, Hosoda T, Misao Y, Esposito G, Gonzalez A, Vitale S, Parolin C, Yasuzawa-Amano S, Muraski J, De Angelis A, LeCapitaine N, **Siggins RW**, Loredi M, Bearzi C, Bolli R, Urbanek K, Leri A, Kajstura J, Anversa P. Formation of Large Coronary Arteries by Cardiac Progenitor Cells. *Proceedings of the National Academy of Sciences*, 2008, 105(5):1668-1673. doi: 10.1073/pnas.0706315105. PMID: 18216245
3. **Siggins RW**, Zhang P, Welsh DA, LeCapitaine NJ, Nelson S. Stem Cells, Phenotypic Inversion, and Differentiation. *International Journal of Clinical and Experimental Medicine*. 2008, 1(1): 2-21. Epub 2008 Jan 20. PMID: 19079683
4. Zhang P, Nelson S, Bagby GJ, **Siggins RW**, Shellito JE, Welsh DA. Lineage-c-kit+Sca-1+ Cell Response to Escherichia Coli Bacteremia in Balb/c Mice. *Stem Cells*. 2008, 26(7):1778-1786. doi: 10.1634/stemcells.2007-1027. PMID: 18483422
5. Zhang P, Welsh DA, **Siggins RW**, Bagby GJ, Raasch CE, Happel KI, Nelson S. Acute Alcohol Intoxication Inhibits the Lineage-c-kit+Sca-1+ Cell Response to Escherichia Coli Bacteremia. *Journal of Immunology*. 2009, 182(3):1568-1576. doi: 10.4049/jimmunol.182.3.1568. PMID: 19155505
6. **Siggins RW**, Bagby GJ, Molina PE, Dufour J, Nelson S, Zhang P. Alcohol Exposure Impairs Myeloid Dendritic Cell Function in Rhesus Macaques. *Alcoholism: Clinical and Experimental Research*. 2009, 33(9):1524-1531. doi: 10.1111/j.1530-0277.2009.00980.x. PMID: 19485975
7. Raasch CE, Zhang P, **Siggins RW**, LaMotte L, Bagby GJ, Nelson S. Acute Alcohol Intoxication Impairs the Hematopoietic Precursor Cell Response to Pneumococcal Pneumonia. *Alcoholism: Clinical and Experimental Research*. 2010, 34(12):2035-2043. doi: 10.1111/j.1530-0277.2010.01291.x. PMID: 20659065

8. **Siggins RW**, Melvan JN, Welsh DA, Bagby GJ, Nelson S, Zhang P. Alcohol Suppresses the Granulopoietic Response to Pulmonary Streptococcus pneumonia Infection with Enhancement of STAT3 Signaling. *Journal of Immunology*. 2011, 186(7):4306-4313. doi: 10.4049/jimmunol.1002885. PMID: 21357267
 9. Melvan JN, **Siggins RW**, Bagby GJ, Stanford WL, Welsh DA, Nelson S, Zhang P. Suppression of Stem Cell Antigen-1 Response and Granulocyte Lineage Expansion by Alcohol During Septicemia. *Critical Care Medicine*. 2011, 39(9):2121-2130. doi: 10.1097/CCM.0b013e31821e89dc. PMID: 21602669
 10. Melvan JN, **Siggins RW**, Stanford WL, Porretta C, Nelson S, Bagby GJ, Zhang P. Alcohol Impairs the Myeloid Proliferative Response to Bacteremia in Mice by Inhibiting the Stem Cell Antigen-1/ERK Pathway. *Journal of Immunology*. 2012; 188(4):1961-9. doi: 10.4049/jimmunol.1102395. PMID: 22238460
 11. Shi X, **Siggins RW**, Stanford WL, Melvan JN, Basson MD, Zhang P. Toll-Like Receptor 4/Stem Cell Antigen-1 Signaling Promotes Hematopoietic Precursor Cell Commitment to Granulocyte Development during the Granulopoietic Response to E. coli Bacteremia. *Infection and Immunity*. 2013; 81(6):2197-2205. doi: 10.1128/IAI.01280-12. PMID: 23545304
 12. **Siggins RW**, Hossain F, Rehman T, Melvan JN, Zhang P, Welsh DA. Cigarette smoke alters the hematopoietic stem cell niche. *Medical Sciences*. 2014; 2(1): 37-50. doi: 10.3390/medsci2010037 Epub 2014 Feb 18. PMID: 28868162
 13. **Siggins RW**, Molina P, Zhang P, Bagby GJ, Nelson S, Dufour J, LeCapitaine NJ, Walsh C, Welsh D.A. Chronic alcohol administration in rhesus macaques during the early stage of Simian Immunodeficiency Virus infection dysregulates late stage myelopoiesis. *Alcoholism: Clinical and Experimental Research*. 2014; 38(7):1993-2000. doi: 10.1111/acer.12433. PMID: 24942272
 14. Bagby GJ, Amedee AM, **Siggins RW**, Molina PE, Nelson S, Veazey R. Alcohol and HIV Effects on the Immune System. *Alcohol Research: Current Reviews*. 2015; 37(2):287-297. PMID: 26695751
 15. Souza-Smith F, **Siggins RW**, Molina PE. Mesenteric lymphatic-perilymphatic adipose crosstalk; role in alcohol-induced perilyphatic adipose tissue inflammation. *Alcoholism: Clinical and Experimental Research*. 2015; 39(8):1380-1387. doi: 10.1111/acer.12796. PMID: 26147204
 16. Katz PS*, **Siggins RW***, Porretta C, Armstrong ML, Zea AH, Mercante DE, Parsons C, Veazey RS, Bagby GJ, Nelson S, Molina PE, Welsh, DA. Chronic alcohol increases CD8+ T-cell immunosenescence in simian immunodeficiency virus-infected rhesus macaques. *Alcohol*. 2015; 49(8):759-765. doi: 10.1016/j.alcohol.2015.09.003. PMID: 26603633
- * indicates co-first authorship

17. Simon L, **Siggins R**, Winsauer P, Brashear M, Ferguson T, Mercante D., Song K, Vande Stouwe C, Nelson S, Bagby G, Amedee A, Molina PE. Simian Immunodeficiency Virus Infection Increases Blood Ethanol Concentration Duration After Both Acute and Chronic Administration. *AIDS Res Hum Retroviruses*. 2018; 34(2):178-184. doi: 10.1089/AID.2017.0195. PMID: 29037050
18. Duplanty AA, **Siggins RW**, Allerton T, Simon L, Molina PE. Myoblast mitochondrial respiration is decreased in chronic binge alcohol administered simian immunodeficiency virus-infected antiretroviral-treated rhesus macaques. *Physiol Rep*. 2018; 6(5): doi: 10.14814/phy2.13625. PMID: 29504290
19. Welsh DA, Ferguson T, Theall KP, Simon L, Amedee A, **Siggins RW**, Nelson S, Brashear M, Mercante D, Molina PE. 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 Clin Exp Res*. 2019 Apr;43(4):704-709. doi: 10.1111/acer.13980. PMID: 30748025
20. Souza-Smith FM, Simon L, **Siggins RW**, Molina, PE Alcohol-Induced Mesenteric Lymphatic Permeability: Link to Immunometabolic Modulation of Perilymphatic Adipose Tissue. *Int J Mol Sci*. 2019 Aug 22;20(17). pii: E4097. doi: 10.3390/ijms20174097. PMID: 31443389
21. Samuelson DR, **Siggins RW**, Ruan S, Amedee AM, Sun J, Zhu QK, Marasco WA, Taylor CM, Luo M, Welsh DA, Shellito JE. Alcohol consumption increase susceptibility to pneumococcal pneumonia in a humanized murine HIV model mediated by intestinal dysbiosis. *Alcohol*. 2019; 80:33-43. doi: 10.1016/j.alcohol.2018.08.012. PMID: 30213614
22. Maffei VJ, Ferguson TF, Brashear MM, Mercante DE, Theall KP, **Siggins RW**, Taylor CM, Molina P, Welsh DA. Lifetime alcohol use among persons living with HIV is associated with frailty. *AIDS*. 2020 Feb 1; 34(2):245-254. doi: 10.1097/QAD.0000000000002426. PMID: 31714352
23. Mouton AJ, El Hajj EC, Ninh VK, **Siggins RW**, Gardner JD. Inflammatory cardiac fibroblast phenotype underlies chronic alcohol-induced cardiac atrophy and dysfunction. *Life Sci*. 2020 Mar 15; 245:117330. doi: 10.1016/j.lfs.2020.117330. Epub 2020 Jan 18. PMID: 31962130
24. Ferguson TF, Theall KP, Brashear M, Maffei VJ, Beauchamp A, **Siggins RW**, Simon L, Mercante D, Nelson S, Welsh DA, Molina PE. Comprehensive Assessment of Alcohol Consumption in People Living with HIV (PLWH): The New Orleans Alcohol Use in HIV Study. *Alcohol Clin Exp Res*. 2020 Jun;44(6):1261-1272. doi: 10.1111/acer.14336. Epub 2020 May 22. PMID: 32441814
25. Maffei VJ, **Siggins RW**, Luo M, Brashear MM, Mercante DE, Taylor CM, Molina P, Welsh DA. Alcohol Use Is Associated with Intestinal Dysbiosis and Dysfunctional CD8+ T-Cell Phenotypes in Persons with HIV. *J Infect Dis*. 2020 Jul 29. 223(6):1029-1039. doi: 10.1093/infdis/jiaa461. PMID: 32725203

26. Gu M, Samuelson DR, Taylor CM, Molina PE, Luo M, **Siggins RW**, Shellito JE, Welsh DA. Alcohol-associated intestinal dysbiosis alters mucosal-associated invariant T-cell phenotype and function. *Alcohol Clin Exp Res*. 2021 May. 45(5): 934-947. doi: 10.1111/acer.14589. PMID: 33704802
27. McTernan PM, Katz PS, Porretta C, Welsh DA, **Siggins RW**. A Novel FACS-Based Workflow for Simultaneous Assessment of RedOx Status, Cellular Phenotype, and Mitochondrial Genome Stability. *BioChem*. 2021, 1(1), 1-18; <https://doi.org/10.3390/biochem1010001>. PMID: 35937039
28. Gu M, Samuelson DR, de la Rua NM, Charles TP, Taylor CM, Luo M, **Siggins RW**, Shellito JE, Welsh DA. Host innate and adaptive immunity shapes the gut microbiota biogeography. *Microbiol Immunol*. 2022 June. 66(6): 330-341. doi: 10.1111/1348-0421.12963. PMID: 35067963
29. Zifodya JS, Ferguson TF, **Siggins RW**, Brashear MM, Kantrow SP, Nelson S, Shellito JE, Molina PE, Welsh DA. Cross sectional analysis of the effect of alcohol on pulmonary function in a cohort of men and women living with HIV. *Alcohol*. 2022 Jun; 101:45-51. doi: 10.1016/j.alcohol.2022.03.001. PMID: 35306109
30. McTernan PM, Levitt DE, Welsh DA, Simon L, **Siggins RW**, Molina PE. Alcohol Impairs Immunometabolism and Promotes Naïve T Cell Differentiation to Pro-Inflammatory Th1 CD4+ T Cells. *Front Immunol*. 2022 May 12;13:839390. doi: 10.3389/fimmu.2022.839390. eCollection 2022. PMID: 35634279
31. McTernan PM, **Siggins RW**, Catinis A, Amedee AM, Simon L, Molina PE. Chronic Binge Alcohol and Ovarian Hormone Loss Dysregulate Circulating Immune Cell SIV Co-Receptor Expression and Mitochondrial Homeostasis in SIV-Infected Rhesus Macaques. *Biomolecules*. 2022 July 5. 12(7):946. <https://doi.org/10.3390/biom12070946>. PMID: 35883501
32. Levitt DE, Simon L, Lin HY, **Siggins RW**, Ferguson TF, Molina PE, Welsh DA. Alcohol Use, Physical Activity, and Muscle Strength Moderate the Relationship Between Body Composition and Frailty Risk Among People Living with HIV. *Alcohol Clin Exp Res*. 2022 Nov;46(11):2041-2053. doi: 10.1111/acer.14941. Epub 2022 Oct 20. PMID: 36124866
33. **Siggins RW**, McTernan PM, Simon L, Souza-Smith FM, Molina PE. Mitochondrial Dysfunction: At the Nexus between Alcohol-Associated Immunometabolic Dysregulation and Tissue Injury. *Int J Mol Sci*. 2023 May 12;24(10):8650. doi: 10.3390/ijms24108650. PMID: 37239997
34. Shi X, Simms KJ, Ewing TJ, Lin YP, Chen YL, Melvan JN, **Siggins RW**, Zhang P. The Bone Marrow Endothelial Progenitor Cell Response to Septic Infection. *Front Immunol*. Under Review.

Book Chapters:

1. **Siggins RW** and Hornick CA “Endothelial Cell Responses to Physiological and Pathophysiological Environments.” In: Anti-Angiogenic Functional and Medicinal Foods. Lasso J, Bagchi D, and Shahidi F, eds., CRC Press, 2007, pg. 349-364.
2. Leri A, Boni A, **Siggins RW**, Nascimbene A, Hosoda T. “Cardiac Stem Cells and Their Niches.” In: Cardiac Regeneration and Stem Cell Therapy. Leri A, Anversa P, and Frishman W, eds., Malden: Blackwell Publishing, 2007, pg. 87-94.

Published Abstracts:

Regional

1. **Siggins RW**, Welsh DA, Nelson S, Bagby GJ, Shellito JE, Zhang P. The Hematopoietic Stem Cell Response to Gram Negative Bacteremia. *The Southern Regional Meeting of the SSCI*, February 2008; Oral Presentation.
2. LeCapitaine NJ, **Siggins RW**, Zhang P, DeBoisblanc B, Welsh DA. Plasma Microparticles Contain Functional Mitochondria. *The Southern Regional Meeting of the SSCI*, February 2010; Poster Presentation.

National

1. Boni A, Rota M, **Siggins RW**, Hosoda T, Nascimbene A, Amano K, Gonzalez Miqueo A, Amano S, Vitale S, Trofimova I, Bearzi C, Valentini S, Urbanek K, Kajstura J, Anversa P, Leri A. Cardiac Progenitor Cell Migration after Myocardial Infarction. *Meeting of the American Heart Association*, November 2006, Oral Presentation.
2. Tillmanns J, Rota M, Hosoda T, Amano S, Rotatori F, LeCapitaine N, **Siggins RW**, Hintze T, Esposito G, De Angelis A, Loredi M, Misao Y, Bearzi C, Urbanek K, Leri A, Kajstura J, Sonnenblick EH, Anversa P. IGF-1 and HGF Promote the Engraftment of Cardiac Stem Cells, which in Turn Regenerate the Entire Coronary Vasculature and the Dead Myocardium after Infarction in Rats. *Meeting of the American Heart Association*, November 2006, Oral Presentation.
3. Hosoda T, Bearzi C, Amano S, Rota M, Valentini S, Delucchi F, Tillmanns J, Nascimbene A, De Angelis A, **Siggins RW**, Zias E, Quaini F, Urbanek K, Leri A, Kajstura J, Bolli R, Anversa P. Human Cardiac Progenitor Cells Regenerate Cardiomyocytes and Coronary Vessels Repairing the Infarcted Myocardium. *Meeting of the American Heart Association*, November 2006, Oral Presentation.
4. Hosoda T, Bearzi C, Rota M, Amano S, Valentini S, Delucchi F, Tillmanns J, Nascimbene A, De Angelis A, **Siggins RW**, Zias E, Quaini F, Urbanek K, Leri A, Kajstura J, Bolli R, Anversa P. Human Cardiac Progenitor Cells. *Meeting of the American Heart Association*, November 2006, Oral Presentation.

5. Hosoda T, Yasuzawa-Amano S, Amano K, Boni A, Urbanek K, Delucchi F, Padin-Iruegas ME, Gonzalez Miqueo A, **Siggins RW**, Misao Y, LeCapitaine NJ, Iaffaldano G, Sonnenblick EH, Kajstura J. Defects in the c-kit-SCF System Have Profound Effects on Myocardial Gene Expression. *Meeting of the American Heart Association*, November 2007, Poster Presentation.
6. Mosna F, Bearzi C, Rota M, Hosoda T, Tillmanns J, Yasuzawa-Amano S, Trofimova I, **Siggins RW**, LeCapitaine N, D'Alessandro DA, Zias E, Quaini F, Urbanek K, Rimoldi O, Michler RE, Bolli R, Kajstura J, Leri A, Frishman WH, Anversa P. Origin and Therapeutic Efficacy of Human Cardiac Progenitor Cells. *Meeting of the American Heart Association*, November 2007, Poster Presentation.
7. Hosoda T, Yasuzawa-Amano S, Amano K, Boni A, Urbanek K, Delucchi F, Arcarese ML, Gonzalez Miqueo A, **Siggins RW**, Misao Y, LeCapitaine NJ, Mosna F, Sonnenblick EH, Kajstura J, Bolli R, Anversa P, Leri A. Deregulation of MicroRNAs in the Heart of c-kit-Defective Mice. *Meeting of the American Heart Association*, November 2007, Oral Presentation.
8. Boni A, Nascimbene A, **Siggins RW**, Urbanek K, Amano K, Delucchi F, Yasuzawa-Amano S, LeCapitaine N, Trofimova I, Di Marco A, Vitale S, Small N, Mosna F, Gonzalez A, Rimoldi O, Kajstura J, Anversa P, Leri A. Notch1 Receptor Enhances Myocyte Differentiation of Cardiac Progenitor Cells and Myocardial Regeneration After Infarction. *Meeting of the American Heart Association*, November 2007, Oral Presentation.
9. Delucchi F, Urbanek K, Boni A, **Siggins RW**, Amano K, Iaffaldano G, Yasuzawa-Amano S, LeCapitaine N, Vitale S, Gonzalez A, Di Marco A, Trofimova I, Rizzi R, Misao Y, Anversa P, Kajstura J, Leri A. Notch Regulates Cardiac Progenitor Cell Commitment and Myocyte Formation in the Embryonic Mouse Heart. *Meeting of the American Heart Association*, November 2007, Oral Presentation.
10. **Siggins RW**, Nelson S, Welsh DA, Bagby GJ, Shellito JE, Zhang P. Alcohol Inhibits the Hematopoietic Stem Cell Response to Bacteremia. *Research Society on Alcoholism*, June 2008; Poster Presentation.
11. **Siggins RW**, Nelson S, Bagby GJ, Shellito JE, Dufour J, Welsh DA, Zhang P. The Effects of Alcohol on Myeloid Dendritic Cell Function in Rhesus Macaques. *Society of Leukocyte Biology*, November 2008; Poster Presentation.
12. **Siggins RW**, Welsh DA, Bagby GJ, Raasch CE, Happel KI, Nelson S, Zhang P. Acute Alcohol Intoxication Inhibits the Hematopoietic Precursor Cell Response to Escherichia coli Bacteremia. *Experimental Biology*, April 2009; Poster Presentation.
13. **Siggins RW**, Melvan JN, Bagby GJ, Welsh DA, Nelson S, Zhang P. Alcohol Inhibits Expression of Granulopoietic Transcription Factors in Hematopoietic Precursor Cells Following Bacteremia. *Research Society on Alcoholism*, June 2009; Poster Presentation.

14. LeCapitaine NJ, Zhang P, **Siggins RW**, Porretta C, Nelson S, Shellito J, Welsh DA. Acute Alcohol Intoxication Decreases Total Blood Microparticle Content. *Research Society on Alcoholism*, June 2009; Poster Presentation.
15. Zhang P, Bagby GJ, **Siggins RW**, Raasch CE, Welsh DA, Nelson S. Alcohol and Impairment of the Lineage-C-Kit+Sca-1+ Cell Response to Bacterial Infection. *Research Society on Alcoholism*, June 2009; Oral Presentation.
16. **Siggins RW**, Welsh DA, Bagby GJ, Nelson S, Zhang P. Acute alcohol intoxication inhibits the bone marrow lin-c-kit+Sca-1+VEGFR2+ cell response to septicemia. *Alcohol and Immunology Research Interest Group Meeting*, November 2009, Oral Presentation.
17. Melvan JN, **Siggins RW**, Zhang P, Nelson S, Bagby GJ. Acute Alcohol Intoxication Inhibits Stem Cell Antigen-1 Expression by Gr1+ Myeloid Lineage Committed Precursor Cells during Bacteremia. *Experimental Biology*, April 2010, Poster Presentation.
18. **Siggins RW**, Welsh DA, Bagby GJ, Nelson S, Zhang P. The Bone Marrow Lin-C-kit+Sca-1+VEGFR2+ Cell Response to Septicemia. *American Thoracic Society International Conference*, May 2010, Poster Presentation.
19. **Siggins RW**, Melvan JN, Bagby GJ, Nelson S, Zhang P. Alcohol Abuse and the Impairment of Hematopoiesis. *Research Society on Alcoholism*, June 2010, Oral Presentation.
20. **Siggins RW**, Welsh DA, Bagby GJ, Nelson S, Zhang P. Acute Alcohol Intoxication Inhibits the Bone Marrow Lin-c-kit+Sca-1+VEGFR2+ Cell Response to E coli Bacteremia. *Research Society on Alcoholism*, June 2010, Poster Presentation.
21. **Siggins RW**, Molina PE, Nelson S, Bagby GJ, Kolls JK, Welsh DA, Zhang P. Alcohol Enhances Osteoclastogenesis and Inhibits Dendropoiesis. *Alcohol and Immunology Research Interest Group Meeting*, November 2010, Poster Presentation.
22. Hossain F, Subramaniam V, **Siggins RW**, Zhang P, Shellito J, Welsh DA. Chronic Cigarette Smoke Exposure Perturbs the Functional Properties of Murine Mesenchymal Stem Cells. *The Southern Regional Meeting of the SSCI*, Feb. 2011, Oral Presentation.
23. Zhang P, **Siggins RW**, Welsh DA, Bagby GJ, Dufour JP, Nelson S. The Effects of Excessive Alcohol Consumption on the Development of Myelosuppression During SIV Infection. *Society on NeuroImmune Pharmacology*, April 2011, Oral Presentation.
24. Melvan JN, **Siggins RW**, Porretta C, Nelson S, Bagby GJ, Zhang P. Alcohol Suppresses Stem Cell Antigen-1-Associated Myeloid Precursor Proliferation During Bacteremia. *Experimental Biology*, April 2011, Poster Presentation.
25. Zhang P, **Siggins RW**, Melvan JN, Welsh DA, Bagby GJ, Nelson S. Bone Marrow: Alcohol Modulation of the Hematopoietic Stem Cell Response and Host

- Defense Against Bacterial Infection. *Research Society on Alcoholism*, June 2011, Oral Presentation.
26. **Siggins RW**, Molina PE, Bagby GJ, Nelson S, Kolls JK, Welsh DA, Zhang P. Alcohol Enhances Osteoclastogenesis and Inhibits Dendropoiesis from a Common Upstream Progenitor. *Research Society on Alcoholism*, June 2011, Poster Presentation.
 27. Melvan JN, **Siggins RW**, Porretta C, Bagby GJ, Welsh DA, Nelson S, Zhang P. Alcohol Intoxication Suppresses Sca-1-Associated Myeloid Precursor Cell Proliferation During Bacteremia. *Research Society on Alcoholism*, June 2011, Poster Presentation.
 28. **Siggins RW**, Piet V, Amedee A, Bagby GJ, Nelson S, Welsh DA, Molina PE. Differential Effects of Alcohol Exposure and SIV Proteins on Mesenchymal Stem Cell Adipo- and Osteogenesis. *Research Society on Alcoholism*, June 2012, Poster Presentation.
 29. Shi X, **Siggins RW**, Melvan JN, Zhang P. Alcohol Impairs Marrow LKS Cell Proliferation in Response to Bacteremia. *Research Society on Alcoholism*, June 2012, Poster Presentation.
 30. **Siggins RW**, Welsh DA, Bagby GJ, Nelson S, Zhang P, Molina PE. Promotor Methylation in Hematopoietic Progenitor Cells; Alcohol-induced Dysregulated Differentiation. *Research Society on Alcoholism*, June 2012, Oral Presentation.
 31. Upchurch GM, Bagby GJ, Nelson S, Molina PE, **Siggins RW**. Alcohol Exposure Dysregulates Hematopoietic Progenitor Cell Notch-Mediated Dendropoiesis. *Research Society on Alcoholism*, June 2013, Poster Presentation.
 32. Katz PS, Prince AC, Bagby GJ, Nelson S, Welsh DA, **Siggins RW**, Molina PE. Chronic Binge Alcohol and SIV Infection Alter Mesenchymal Stem Cell Metabolic Gene Expression. *Research Society on Alcoholism*, June 2013, Poster Presentation.
 33. Porretta CP, Katz PS, Welsh DA, Zea A, **Siggins RW**. Novel Workflow Combining FACS Analysis and qPCR for Mitochondrial DNA Quantification to Assess Intracellular Reactive Oxygen Species Production, Glutathione Content, Functional and Total Mitochondria, and Cell Phenotype in Physiological and Stress-induced Aging. *International Society for Advancement of Cytometry CYTO*, May 2014; Poster Presentation.
 34. **Siggins RW**, Welsh DA, Zhang P, Molina PE, Bagby GJ, Nelson S, Porretta C. Dysregulation of Myelopoiesis by Chronic Alcohol Administration during Early SIV Infection in Rhesus Macaques. *Research Society on Alcoholism*, June 2014, Poster Presentation.
 35. Katz PS, Porretta CP, Bagby GJ, Nelson S, Molina PE, **Siggins RW**, Zea A., Welsh DA. Chronic Alcohol Increases CD8+ T Cell Immunosenescence in Simian Immunodeficiency Virus Infected Macaques. *Research Society on Alcoholism*, June 2014, Poster Presentation.

36. Li L, Bagby GJ, Nelson S, Molina PE, Welsh DA, **Siggins RW**, Zea A, Welsh DA. Antiretroviral Therapy Attenuates Dysregulated Hematopoiesis Caused by Chronic Binge Alcohol and SIV Infection in Rhesus Macaques. *Alcohol and Immunology Research Interest Group Meeting*, November 2014, Poster Presentation.
37. **Siggins RW**, Katz PS, Porretta CP, Welsh DA. Chronic Binge Alcohol Decreases Mesenchymal Stem Cell Protective Capacity for Reactive Oxygen Species. *Research Society on Alcoholism*, June 2015, Poster Presentation.
38. Katz PS, **Siggins RW**, Mayeux JP, Gilpin NW, Molina, PE. Post-traumatic Brain Injury Alcohol Exposure Increases Blood-brain Barrier Permeability and Peripheral Immune Cell Infiltration. *Research Society on Alcoholism*, June 2015, Poster Presentation.
39. Porretta CP, Welsh DA, **Siggins RW**. Chronic *In Vitro* Alcohol Increases Mitochondrial DNA Deletions in T Cells. *International Society for Advancement of Cytometry CYTO*, June 2016; Poster Presentation.
40. Maxi JK, **Siggins RW**, Bagby GJ, Nelson S, Molina PE. Antiretroviral Therapy Reduces Neuroinflammatory Gene Expression in Chronic Binge Alcohol-administered SIV-infected Macaques. *Research Society on Alcoholism*, June 2016, Poster Presentation.
41. Porretta CP, Welsh DA, **Siggins RW**. Chronic *In Vitro* Alcohol Increases Mitochondrial DNA Depletion in T Cells and Promotes Immunosenescence. *Research Society on Alcoholism*, June 2016, Poster Presentation.
42. **Siggins RW**, Ferguson TF, Porretta CP, Molina PE, Welsh DA. Alcohol Consumption Differentially Affects CD8+ T cell Phenotypes in People Living With HIV/AIDS (PLWHA) that is Dependent on Viral Suppression. *Research Society on Alcoholism*, June 2017, Poster Presentation.
43. Souza-Smith FM Simon L, **Siggins RW**, Molina PE. Alcohol-Induced Gut Lymphatic Leak Results in Adipocentric Immunometabolic Dysregulation in Female Rats. *Experimental Biology*, April 2018, Poster Presentation.
44. **Siggins RW**, Maffei VJ, Ferguson TF, Porretta CP, Taylor CM, Molina PE, Welsh DA. Alcohol Use Positively Correlates with CD8+ T-cell Exhaustion in People Living with HIV. *Research Society on Alcoholism*, June 2018, Poster Presentation.
45. Maffei VJ, **Siggins RW**, Porretta CP, Ferguson TF, Brashear MM, Taylor CM, Molina PE, Welsh DA. Recent and Medium-Term Alcohol Consumption are Associated with CD8+ T-Cell Immunosenescence In Persons Living With HIV. *Research Society on Alcoholism*, June 2018, Poster Presentation.
46. Samuelson DR, **Siggins RW**, Shellito, JE, Taylor CM, Molina PE, Welsh DA. Intestinal Microbial Products Associated with Alcohol Consumption Mediate Peripheral Blood Mononuclear Cell Immune Activation. *Research Society on Alcoholism*, June 2018, Poster Presentation.

47. Ferguson TF, Carr R, Ronis MJ, Brashear MM, **Siggins RW**, Welsh DA, Molina PE. Increased Burden Of Liver Disease In People Living With HIV: Hazardous Alcohol Use. *Research Society on Alcoholism*, June 2018, Poster Presentation.
48. Souza-Smith FM, Simon L, **Siggins RW**, Molina PE. Mesenteric Lymphatic / Perilymphatic Adipose Tissue Crosstalk; Mechanism of Alcohol Immunomodulation. *Research Society on Alcoholism*, June 2018, Poster Presentation.
49. Maffei VJ, **Siggins RW**, Ferguson TF, Brashear MM, Theall KP, Taylor CM, Molina PE, Welsh DA. Alcohol-Associated Biological Aging Is Potentiated By Detectable Virus In Persons Living With HIV. *Research Society on Alcoholism*, June 2018, Poster Presentation.
50. Molina PE, Simon L, Welsh DA, Amedee AM, **Siggins RW**, Ferguson TF, Brashear MM, Primeaux SD. Alcohol-SIV/HIV-ART Interactions & Metabolic Comorbidity Pathways. *Research Society on Alcoholism*, June 2018, Oral Presentation.
51. Molina PE, Duplanty AA, **Siggins RW**, Simon L. Alcohol-SIV/HIV-ART Interactions & Resulting Comorbidities. *Research Society on Alcoholism*, June 2018, Oral Presentation.
52. Porretta CP, **Siggins RW**, Welsh DA. Alcohol Attenuates Senescent T-cell Activation-Induced Cell Death. *International Society for Advancement of Cytometry CYTO*, June 2019; Poster Presentation.
53. **Siggins RW**, Maffei VJ, Ferguson TF, Porretta CP, Molina PE, Welsh DA. Alcohol Use and Markers of Gut Leak Positively Associate with CD8+ T Cell Exhaustion and Senescence in Persons Living with HIV. *Research Society on Alcoholism*, June 2019, Poster Presentation.
54. Simon L, Molina PE, Ford SM, Ferguson TF, Welsh DA, Brashear MM, Amedee AM, **Siggins RW**, Primeaux SD. Chronic Alcohol and HIV Contributes to Metabolic Dysregulation: Impact of Impaired Insulin Secretion. *Research Society on Alcoholism*, June 2019, Oral Presentation.
55. Molina PE, Simon L, Welsh DA, Amedee AM, **Siggins RW**, Ferguson TF, Brashear MM, Primeaux SD. Mechanisms Underlying Risk for Comorbidities Associated with At-risk Alcohol Consumption; Metabolic Instability in Persons Living with HIV (PLWH). *Research Society on Alcoholism*, June 2019, Oral Presentation.
56. McTernan PM, **Siggins RW**, Simon L, Molina PE. Ovariectomy Increases CD4+ T cell Activation in Simian Immunodeficiency Virus Infection. *Experimental Biology*, May 2021, Poster Presentation.
57. Molina PE, Simon L, Levitt DE, Catinis A, Amedee AM, **Siggins RW**. Alcohol-associated Metabolic Dyshomeostasis; Role in Enhanced Viral Pathogenesis. *Research Society on Alcoholism*, June 2021, Oral Presentation.

58. Catinis A, McTernan PM, **Siggins RW**, Simon L, Molina PE. Chronic Binge Alcohol Administration Upregulates Antioxidative Gene Expression in Peripheral Blood Mononuclear Cell in SIV-infected Macaques. *Research Society on Alcoholism*, June 2021, Poster Presentation.
59. Gu M, Gunda S, Samuelson DR, Luo M, **Siggins RW**, Molina PE, Taylor CM, Shellito JE, Welsh DA. Alcohol-associated impact of sIgA-coated Intestinal Bacteria on Pulmonary Host Defense During Streptococcus Pneumoniae Infection. *Research Society on Alcoholism*, June 2021, Poster Presentation.
60. McTernan PM, **Siggins RW**, Simon L, Molina PE. Alcohol Promotes Differentiation of CD4 T Cells to Pro-inflammatory Th1 Cells. *Research Society on Alcoholism*, June 2021, Poster Presentation.
61. **Siggins RW**, Lin H, Samuelson DR, Porretta CP, McTernan PM, Molina PE, Welsh DA. High Audit Scores in Persons Living with HIV Lead to Increased Senescent CD8+ T Cells and Greater Expression of Senescence-associated Secretory Phenotype Proteins. *Research Society on Alcoholism*, June 2021, Poster Presentation.
62. McTernan PM, **Siggins RW**, Simon L, Molina PE. Alcohol Dysregulates CD4 T Cell Mitochondrial Homeostasis. *Experimental Biology*, May 2022, Oral Presentation.
63. Gu M, Shellito JE, Taylor CM, Luo M, **Siggins RW**, Molina PE, Welsh DA. Western diet plus alcohol induce liver hepatitis associated with gut barrier dysfunction. *Research Society on Alcoholism*, June 2022, Poster Presentation.
64. Zaparte A, Gu M, Shellito JE, **Siggins RW**, Taylor CM, Molina PE, Welsh DA. Targeting the Gut Microbiota to Treat Alcohol-associated Dysbiosis. *Research Society on Alcoholism*, June 2022, Poster Presentation.
65. McTernan PM, Levitt DE, **Siggins RW**, Welsh DA, Simon L, Molina PE. Alcohol Impairs Mitochondrial Respiration Within Differentiating CD4+ T Cells. *Research Society on Alcoholism*, June 2022, Poster Presentation.
66. Levitt DE, Simon L, Lin HY, **Siggins RW**, Molina PE, Welsh DA. Fat-free Body Mass Protects Against Frailty in People Living with HIV. *Research Society on Alcoholism*, June 2022, Poster Presentation.
67. **Siggins RW**, Lin H, Ferguson T, Welsh DA, Simon L, Molina PE. Relationship of Composite Inflammatory Score with Metabolic Homeostasis Measures in PLWH Enrolled in the New Orleans Alcohol Use and HIV (NOAH) Study. *Research Society on Alcoholism*, June 2022, Poster Presentation.
68. **Siggins RW**, McTernan PM, Lin H, Simon L, Welsh DA, Molina PE. Effects of Alcohol on Bioenergetics in Cells of the Immune System and Its Impact on Immune Activation and Senescence. *Research Society on Alcoholism*, June 2023, Oral Presentation.

Scientific Presentations:**Departmental Seminars:**

1. Acute Alcohol Intoxication Inhibits the Bone Marrow Lin-ckit+Sca-1+VEGFR2+ Cell Response to Septicemia, *Physiology Seminar Series*, LSUHSC-NO, November 18, 2009
2. Alcohol and Impaired Myelo-Dendropoiesis, *Physiology Seminar Series*, LSUHSC-NO, August 5, 2010
3. DNA Methylation and Bone Marrow Progenitor Cell Differentiation: Possible Interactions with the NOTCH Signaling Pathway, *Physiology Seminar Series*, LSUHSC-NO, June 7, 2012
4. Mechanisms of Alcohol Disrupted Myelopoiesis, *Physiology Seminar Series*, LSUHSC-NO, April 18, 2013
5. Alcohol Abuse, HIV, & the Mitochondrial Free Radical Theory of Aging, *Physiology Seminar Series*, LSUHSC-NO, May 8, 2014
6. Alcohol, Mitohormesis & T cell Immunosenescence, *Physiology Seminar Series*, LSUHSC-NO, February 4, 2016
7. Alcohol & Immunosenescence, *Physiology Seminar Series*, LSUHSC-NO, May 4, 2017
8. qPCR: Methodologies, Pitfalls, & Analyses, *Physiology Seminar Series*, LSUHSC-NO, September 18, 2018
9. Immunosenescence, T Cell Metabolism, & Mitochondrial Function, *Physiology Seminar Series*, LSUHSC-NO, March 19, 2020
10. Alcohol and T Cell Immunosenescence, *Physiology Seminar Series*, LSUHSC-NO, February 18, 2021

Other LSUHSC Seminars:

1. Alcohol Attenuates NOTCH-mediated Dendropoiesis, *Cardiovascular Center of Excellence COBRE Work-in-progress*, LSUHSC-NO, October 18, 2012
2. RedOx Status in Bone Marrow Stem Cells & Mitohormesis, *Alcohol and Drug Abuse Center of Excellence Biannual Meeting*, LSUHSC-NO, December 12, 2014

3. Mitohormesis & RedOx Status in T Lymphocytes, Department of *Microbiology, Immunology and Parasitology Seminar Series*, LSUHSC-NO, September 23, 2015
4. Mitohormesis & RedOx Status in T Lymphocytes, *Section of Pulmonary and Critical Care Medicine Seminar Series*, LSUHSC-NO, January 20, 2016
5. Alcohol Increases CD8+ T-cell Senescence in People Living with HIV (PLWH), *Alcohol and Drug Abuse Center of Excellence Biannual Meeting*, LSUHSC-NO, May 22, 2019

Regional:

1. **Siggins RW**, Welsh DA, Nelson S, Bagby GJ, Shellito JE, Zhang P. The Hematopoietic Stem Cell Response to Gram Negative Bacteremia. *The Southern Regional Meeting of the SSCI*, Feb. 2008; Oral Presentation.

National:

1. **Siggins RW**, Welsh DA, Bagby GJ, Nelson S, Zhang P. Acute alcohol intoxication inhibits the bone marrow lin-c-kit+Sca-1+VEGFR2+ cell response to septicemia. *Alcohol and Immunology Research Interest Group Meeting*, November 20, 2009.
2. **Siggins RW**, Melvan JN, Bagby GJ, Nelson S, Zhang P. Alcohol Abuse and the Impairment of Hematopoiesis. *Research Society on Alcoholism*, June 27, 2010, Symposium on Biological Systems Approach to Understanding Alcohol-Induced Tissue Injury.
3. **Siggins RW**, Welsh DA, Bagby GJ, Nelson S, Zhang P, Molina PE. Promotor Methylation in Hematopoietic Progenitor Cells; Alcohol-induced Dysregulated Differentiation. *Research Society on Alcoholism*, June 2012, Symposium on Epigenetics and Stem Cells.
4. **Siggins RW**, Mechanisms of Alcohol & SIV/HIV-Induced Bone Marrow Dysfunction. *NeuroHIV and Alcohol Abuse Satellite Symposium*, April 22, 2015.
5. **Siggins RW**, Effects of Alcohol on Bioenergetics in Cells of the Immune System and Its Impact on Immune Activation and Senescence *Research Society on Alcoholism*, June 27, 2023, Symposium on Bioenergetic Dysregulation; Cross-Organ Mechanism of Alcohol-Associated Pathology.

Invited Presentations and Seminars:

Invited Lectures:

1. **Siggins RW**, PCR and RT-qPCR Molecular Biology, Institute of Neuroimmune Pharmacology, Seton Hall University, Feb. 28, 2011

Invited Seminars:**National**

1. **Siggins RW**, Mechanisms of Alcohol Disrupted Myelopoiesis, *Alcohol Research Group, Stritch School of Medicine, Loyola University*, May 2, 2013
2. **Siggins RW**, Mitohormesis and RedOx Status in T Lymphocytes: FACS Phenotyping, Sorting & Gene Expression Analysis, *North America eBiosciences Sales Team Meeting*, Aug. 20, 2015
3. **Siggins RW**, Alcohol & T Cell Immunosenescence, *Tulane /Department of Microbiology & Immunology Envision the Future Seminar Series*, Sept. 29, 2021

Research Review Committees:

- 2015 LSUHSC-NO Clinical Research Grants Review Committee
 2017 LSUHSC-NO Internal Grant Review Committee
 2023 LSUHSC-NO Ad hoc reviewer for REF and Bridge grants

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

2022-present *Frontiers in Immunology*, Review Editor

Reviewer:

2010-2018 *PLoS One*
 2011-present *Alcoholism: Clinical and Experimental Therapeutics*
 2013-2014 *Cellular and Molecular Neurobiology*
 2013-2019 *Alcohol*
 2015-2016 *Journal of Visualized Experiments*
 2020-present *American Journal of Physiology (Cell Physiology)*
 2020-present *Cells*
 2020-present *Pathogens*
 2020-present *Vaccines*
 2021-present *Biochem*
 2022-present *Biomedicines*
 2022-present *Frontiers in Immunology*

- 2022-present *Inflammation*
- 2022-present *International Journal of Molecular Sciences (Trusted Reviewer)*
- 2022-present *Viruses*

SERVICE AND ADMINISTRATION

University/Institutional Service:

Department of Physiology

- 2021 **Faculty Chair**, Organizing Committee, *Alcohol and Drug Abuse Center of Excellence 15th Biannual Meeting*. I worked with the postdoctoral fellow and graduate student co-chairs and the Department of Physiology Assistant Business Manager to develop the program, organize the symposia, recruit judges, and invite the keynote speakers.
- 2021-present **Member**, Department of Physiology Alumnus Award Selection Committee. The committee solicits nominations from Physiology faculty members, rank and determine the three finalists for the award, and submit the finalists for a vote by the department.

School of Graduate Studies

- 2020-2021 **Member**, Admissions Committee for Graduate Studies. This committee reviews applicants to the Interdisciplinary Program (IDP), interviews prospective students, and votes on admissions to the M.S. and Ph.D. programs.
- 2021- present **Member and Chair (2022-present)**, Graduate School Research Day Planning Committee. This committee is responsible for organizing Graduate Student Research Day, which includes solicitation for abstracts, recruitment of judges, and selecting a keynote speaker.

School of Medicine

- 2014-2020 **Member**, Research Advisory Committee. This committee is responsible for space usage surveys and determining space utilization based on funding sources.
- 2022-present **Delegate**, Faculty Assembly. I represent the faculty of the Department of Physiology in monthly meetings by communicating their issues with the assembly, and I report the campus-wide information to physiology faculty members in monthly departmental faculty meetings.

Louisiana Cancer Research Center Biorepository

2021-present **Member**, Tissue Utilization Review Committee (TURC). This committee is responsible for reviewing applications, based on feasibility and scientific merit, for sample requests from the tumor biorepository.

Community Service Activities:

Department of Physiology

2018 **Liaison**, PAL Resource Fair, ADACE Alcohol Outreach. I setup and manned a booth to dispense information pertaining to substance use disorders.

School of Graduate Studies and School of Medicine

2012-present **Judge**, Graduate Student Research Day (6 or the last 12 years). Judges evaluate three-five scientific posters based on a predetermined scoring rubric.

2018-2019 **Judge**, Medical Student Research Day. Judges evaluate three-five scientific posters based on a predetermined scoring rubric.

2023 **Mentor**, 2023 Sci-Fly Mentoring Event. Mentors participate in a "speed-dating" style of mentoring for Summer research interns.

Outside of LSUHSC

2009-2017 **Treasurer**, Boulogny House Condominium Association. Maintained the budget, collected fees, scheduled maintenance, and filed all regulatory paperwork associated with my condominium association.

2017 **Volunteer/Fundraiser** – Music for A Cause

2021-present **Facilitator**, Self-management and Recovery Training (SMART). I lead a weekly, ninety-minute meeting where I assist participants in using SMART tools to enhance their well-being.

2021-2023 **Facilitator**, Recovery Dharma. I chair a weekly meeting, in which I lead a guided meditation and a discussion of select readings.