***Curriculum Vitae***

**Stacy A. Hussong, Ph.D.**

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Department of Biochemistry and Molecular Biology Stacy-Hussong@ouhsc.edu

940 Stanton L. Young Blvd, BMSB 823 Stacy.Hussong@va.gov

**EMPLOYMENT**

Research Health Scientist, Oklahoma City Veterans Health Care System Aug 2021 – present

Assistant Professor/Research, University of Oklahoma Health Sciences Center Aug 2021 - present

Research Health Scientist, South Texas Veterans Health Care System Feb 2018 – Aug 2021

San Antonio, TX

Instructor/Research, UT Health San Antonio Sept 2017 – Aug 2021

Postdoctoral Fellow, Faculty Mentor: Veronica Galvan, Ph.D. at the Nov 2010 –

University of Texas Health Science Center at San Antonio August 2017

Graduate Research Assistant, Thesis: “*Identifying novel roles for the* 2005- Oct 2010

*immunoproteasome in the retina*”, Advisor: Deborah A. Ferrington,

Ph.D., at the University of Minnesota

**EDUCATION**

Ph.D. University of Minnesota, PhD, Graduate program in Biochemistry, October 2010

Molecular Biology and Biophysics (BMBB), Minor: Gerontology

B.S. University of South Dakota: Bachelor of Science, Department of August 2005

Chemistry and Department of Biology

**AWARDS AND HONORS**

*Faculty*

Career Development Award -2, VA Medical Center 2018-2023

Outstanding Junior Faculty Poster Presentation, Center for Biomedical May 2018

Neuroscience 16th Annual Retreat, UT Health San Antonio

Poster Presentation Award – Junior Faculty, 21st Annual Department of Medicine May 2018

Research Day, UT Health San Antonio

Junior Faculty Travel Award, American Aging Association 47th Annual Meeting June 2018

Poster Presentation Award – VA Non-Clinical Research - Faculty, 22nd Annual May 2019

Department of Medicine Research Day, UT Health San Antonio

Junior Faculty Travel Award, American Aging Association 48th Annual Meeting June 2019

*Postdoctoral*:

NIA T32 Training Grant (Biology of Aging) 2010-2013

Third Place Best Postdoctoral Poster Award, Center for Biomedical May 2012

Neuroscience,10th Annual Retreat, UTHSCSA

Research Poster Award – 3rd Place, 1st Annual Postdoctoral Research September 2013

Forum and Distinguished Lecture

San Antonio Life Sciences Institute Best Poster Presentation, 2nd Annual September 2014

Postdoctoral Research Forum and Distinguished Lecture

Joe and Bettie Ward Award for Excellence in the Study of the Biology of Aging November 2015

Superior Postdoctoral Poster Award, 45th Annual Meeting of the American June 2016

Aging Association

*Graduate*:

Best Poster Award, Biochemistry, Molecular Biology, & Biophysics October 2007

University of Minnesota

Travel Fellowship Award, Biochemistry, Molecular Biology, & Biophysics May 2007, 2008

Graduate and Professional Student Assembly Scholarly Travel Award February 2009

Best Poster Award, Gordon Research Conference: Biology of Aging February 2009

Outstanding Poster Presentation, Midwest Eye Research Symposium June 2010

NIA T32 Training Grant (Functional Proteomics of Aging) 2008-2010

*Undergraduate*:

Alpha Lambda Delta Honor Society 1999

Dr. Joseph R. Spies Chemistry Scholarship, University of South Dakota 2002

The Dean Joseph H. Cash Award for Excellence in Writing, University of 2002

South Dakota

Golden Key International Honor Society 2002

Senior Merit Award in Chemistry, University of South Dakota 2003-2004

Phi Beta Kappa Honor Society 2005

Magna Cum Laude, University of South Dakota 2005

**PUBLICATIONS / SUBMITTED ARTICLES**

1. Ethen, C.M., **Hussong, S.A.**, Reilly, C., Feng, X., Olsen, T.W., Ferrington, D.A. 2007. Transformation of the proteasome with age-related macular degeneration. *FEBS Letters* **581**: 885-890. PMCID: PMC1850528
2. Ferrington, D.A., **Hussong, S.A.**, Roehrich, H., Kapphahn, R.J., Kavanaugh, S., Heuss, N. and Gregerson, D.S. 2008. Immunoproteasome responds to injury in the retina and brain. *J Neurochem.* **106**: 158-169. PMCID: PMC4401486
3. **Hussong, S.A.**, Kapphahn, R.J., Phillips, S.L., Maldonado, M., and Ferrington, D.A. 2010. Immunoproteasome deficiency alters retinal proteasome’s response to stress. *J Neurochem.* **113**: 1481-1490. PMCID: PMC2909641
4. **Hussong, S.A.**, Roehrich, H., Kapphahn, R.J., Maldonado, M., Pardue, M.T., and Ferrington, D.A. 2011. A novel role for immunoproteasome in retinal function. *Invest Ophthalmol Vis Sci.,* **52**:714-723. PMCID: PMC3053103
5. Halloran, J.\*, **Hussong, S.A.\* (\*authors contributed equally)**, Burbank, R.R., Podlutskaya, N., Fischer, K., Sloane, L., Austad, S., Strong, J.R., Richardson, A., Hart, M., Galvan, V. 2012. Chronic inhibition of mTOR by rapamycin modulates cognitive and non-cognitive components of behavior throughout lifespan in mice. *Neuroscience* **223C***:*102-113. PMCID: PMC3454865

***Recommended by Faculty of 1000***

1. Pierce, A., Podlutskaya, N., **Hussong, S.A.**, Halloran, J.J., Burbank, R.R., Strong, J.R., Richardson, A., Hart M.J., Galvan, V. 2012. Upregulation of heat shock proteins by chronic rapamycin treatment lowers Aβ and prevents cognitive impairment in mice modeling Alzheimer’s disease. *J Neurochem.* **124**: 880-893.
2. Lin, A.-L., Zheng, W., Halloran, J.J., Burbank, R.R., **Hussong, S.A.**, Hart, M.J., Javors, M., Shih, Y.-Y., Muir, E., Solano Fonseca, R., Strong, R., Richardson, A.G., Lechleiter, J.D., Fox, P.T., and Galvan, V. 2013. Chronic rapamycin restores brain vascular integrity and function through NO synthase activation and improves memory in symptomatic mice modeling Alzheimer’s disease. *J Cereb Blood Flow Metab.* **33**: 1412-1421. PMCID: PMC3764385
3. Lin, A.-L., Pulliam, D., Sathyaeelan, D., Halloran, J., **Hussong, S.A**., Burbank, R., Bresnen, A., Liu, Y., Podlutskaya, N., Soundararajan, A., Muir, E.; Duong, T., Bokov, A., Viscomi, C., Zeviani, M., Richardson, A., Van Remmen, H., Fox, P., Galvan, V. 2013. Decreased mitochondrial function with Surf1-deficiency enhances brain metabolism, blood flow and memory in mice. *J Cereb Blood Flow Metab.* **33**: 1605-1611. PMCID: PMC3790931 ***Recommended by Faculty of 1000***
4. Heuss, N.D., Pierson, M.J., Montaniel, K.R., McPherson, S.W., Lehmann, U., **Hussong, S.A.**, Ferrington, D.A., Low, W.C., Gregerson, D.S. 2014. Retinal dendritic cell recruitment, but not function, was inhibited in MyD88 and TRIF deficient mice. *J* *Neuroinflammation.* **11**:143. PMCID: PMC4149240
5. Bai, X., **Hussong, S.A.** 2014. A new mouse model to study compensatory mechanisms that support normal motor function in Parkinson’s disease. *J. Biochem. Pharmacol. Res.* **2(2)**: 54-56. PMCID: PMC4578241 *(Literature Review)*
6. Schuld, N.J.**\***, **Hussong, S.A.\*** **(\*authors contributed equally)**, Kapphahn, R.J., Lehmann, U., Roehrich, H., Rageh, A., Heuss, N., Gregerson, D.S., Ferrington, D.A. 2015. Immunoproteasome deficiency protects the retina after optic nerve crush. *PloS One* **10(5)**:e0126768. PMCID: PMC4433222
7. Jahrling, J.B., Lin, A, DeRosa, N., **HussongS.A**., Van Skike, C.E., Girotti, M., Javors, M., Zhao, Q., Maslin,L.A., Asmis, R.,Galvan, V. 2018. mTOR Drives Cerebral Blood Flow and Memory Deficits in LDLR-/- Mice Modeling Atherosclerosis and Vascular Cognitive Impairment.  *Journal of Cerebral Blood Flow and Metabolism.* **38(1)**: 58-74. PMCID: PMC5757441
8. Van Skike, C.E., Jahrling, J.B., Olson, A.B., Sayre, N.L., **Hussong, S.A.**, Ungvari, Z., Lechleiter, J.D., Galvan, V. 2018. Inhibition of mTOR protects the blood-brain barrier in models of Alzheimer’s disease and vascular cognitive impairment. *Am J Physiol Heart Circ Physiol.* **314(4)**: H693-H703.PMCID: PMC5966773
9. Zhang, S.Y., Clark, N.E., Freije, C.A., Pauwels, E., Taggart, A., Okada, S., Mandel, H., Garcia, P., Ciancanelli, M.J., Biran, A., Lafaille, F.G., Tsumura, M., Cobat,A., Luo, J., Volpi, S., Zimmer, B., Sakata, S., Dinis, A., Ohara, O., Garcia-Reino, E.J., Dobbs, K., Hasek, M., Holloway, S.P., McCammon, K., **Hussong, S.A.**, DeRosa, N., Lorenzo, L., Hyodo, Van Skike, C.E., Katolik, A., Faria, E., Halwani, R., Fukuhara, R., Galvan, V., Damha, M.J., Al-Muhsen,S., Itan, Y., Boeke, J.D., Notarangelo, L.D., Studer, L., Kobayashi, M., Diogo, L., Fairbrother, W., Abel, L., Rosenberg, B., Hart, J., Etzioni, A., Casanova, J.L. 2018. Inborn errors of lariat metabolism in humans with viral infections of the brainstem. *Cell*. **172(5)**: 952-965. PMCID: PMC5886375
10. Van Skike, C.E., Lin, A-L., Burbank Roberts, R.R., Halloran, J.J., Hernandez, S.F., Cuvillier, J., Soto, V., **Hussong, S.A.**, Jahrling, J., Javors, M., Hart, M.J., Fischer, K., Austad, S.A., and Galvan, V. 2020. mTOR drives cerebrovascular, synaptic, and cognitive dysfunction in normative aging. *Aging Cell.* **19(1):**e13057. PMCID: PMC6974719.
11. Dorigatti, A.O.\*, **Hussong, S.A.\* (\*authors contributed equally)**, Hernandez, S.F., Sills, A.M., Salmon, A.B., Galvan, V. 2020. Primary neuron and astrocyte cultures from postnatal *Callithrix jacchus*: a non-human primate in vitro model for research in neuroscience, nervous system aging, and neurological diseases of aging. *GeroScience.* **43(1):** 115-124.PMCID: PMC8050148.
12. Van Skike, C.E., **Hussong, S.A.**, Hernandez, S.F., Banh, A.Q., DeRosa, N., Galvan, V. 2021. mTOR attenuation with rapamycin reverses neurovascular uncoupling and memory deficits in mice modeling Alzheimer's disease *J.* *Neuroscience.* **41(19):** 4305-4320. PMCID: PMC8143195.
13. **Hussong, S.A.\***, Banh, A.Q.\*, (\*authors contributed equally), Van Skike, C.E., Olson, A.B., Hernandez, S.F., Hart, M.J., Gazynska, M., Osmulski, P.A., McAllen, S.A., Dineley, K.T., Ungvari, Z., Pérez, V.I., Kayed, R., and Galvan, V. Soluble pathogenic tau enters brain vascular endothelial cells and drives cellular senescence and brain microvascular dysfunction in tauopathy. *In revision for Nature Communications.*
14. Van Skike, C.E., DeRosa, Nicholas, Galvan, Veronica and **Hussong, S.A.**. 2022. Rapamycin restores peripheral blood flow in aged mice and in mouse models of atherosclerosis and Alzheimer’s disease. *In revision for GeroScience.*
15. **Hussong S.A.**, Burbank RR, Halloran JJ, DeRosa, N.D., Lin AL, Van Skike, C., Walsh, M.E., Bokov, A., Romero, P., Soto, V.Y., Liu, Y., Maslin, K., Van Remmen H, Austad, S.A., Fox, P.T., and Galvan V. Cell-autonomous and non-cell-autonomous regulation of brain and peripheral metabolism by neuronal mTORC1 signaling. *In revision by for iScience.*
16. **Hussong, S.A**., Galvan, V. mTORC1 regulates AMPK-dependent eNOS activation in brain vascular endothelial cells. *In preparation, to be submitted to Journal of Cerebral Blood Flow and Metabolism.*

**INVITED PRESENTATIONS**

“*An Alternative Role for the Immunoproteasome in Responding to Oxidative* October 2007

*Stress*” San Antonio Nathan Shock Aging Center Conference on Aging

2007, Bandera, TX

“*Immunoproteasome in Retinal Homeostasis*” Scientists in Aging Research December 2008

Meeting, University of Minnesota, Minneapolis, MN

“*An Alternate Role for Immunoproteasome in Retinal Homeostasis: Aging* September 2009

*and Acute Light Stress*” Scientists in Aging Research Fall 2009 Symposium

“*Here, There, and Everywhere: Disconnecting Healthspan from Lifespan by Knocking* November 2015

*Down mTORC1 in Neurons*” Barshop Seminar Series, Joe and Bettie Ward

Award for Excellence in the Study of the Biology Presentation

“*Neuronal mTORC1 regulates brain and whole-body metabolism*” Edward J. Masoro April 2017

Biology of Aging Student Day, UT Health San Antonio

“*Mechanisms linking aging to Alzheimer’s disease*” *in lieu* of Dr. Veronica Galvan. San July 2017

Antonio Life Sciences Institute Aging & Neurodegenerative Diseases Symposium,

University of Texas at San Antonio

“*Prion-like propagation of tau oligomers trigger brain vascular endothelial dysfunction*, July 2018

American Aging Association 47th Annual Meeting, Philadelphia, PA

“*Prion-like propagation of soluble tau aggregates to brain microvascular endothelial* July 2019

*cells promote cellular senescence and blocks eNOS activation,* BRAIN & BRAIN PET 2019

“*Neuronal mTORC1 signaling controls peripheral metabolism*” American Aging May 2022

Association 50th Annual Meeting, San Antonio, TX

**SELECTED ABSTRACTS/ POSTER PRESENTATIONS**

1. **Hussong, S.A**., Ferrington, D.A. “Degradation of Oxidized Proteins by the Immunoproteasome.” Biochemistry, Molecular Biology, & Biophysics Departmental Retreat, University of Minnesota, October 2007 **\*\*Best Poster Award**
2. **Hussong, S.A**., Ferrington, D.A. “Upregulation of Immunoproteasome Protects Against Oxidative Stress” The Association for Research in Vision and Ophthalmology (ARVO) 2007 Annual Meeting, Ft. Lauderdale, FL
3. Gregerson, D.S., Roehrich, H., **Hussong, S.**, Ferrington, D.A. “Alternative Roles for Immunoproteasome – Repairing and Protecting From Retinal Damage” The Association for Research in Vision and Ophthalmology (ARVO) 2007 Annual Meeting, Ft. Lauderdale, FL
4. **Hussong, S.A.**, Ferrington, D.A., “An Alternative Role for Immunoproteasome in Responding to Oxidative Stress,” San Antonio Nathan Shock Aging Center Conference on Aging 2007, Bandera, TX
5. **Hussong, S.A.**, Roehrich, H., Lehmann, U., Gregerson, D.S., Ferrington, D.A. “Immunoproteasome is Upregulated Following Retinal Injury,” The Association for Research in Vision and Ophthalmology (ARVO) 2008 Annual Meeting, Ft. Lauderdale, FL
6. **Hussong, S.A.**, Kavanaugh, S.M., Roehrich, H., Kapphahn, R., Ferrington, D.A. “Immunoproteasome and Retinal Homeostasis: Response to Aging and Acute Light Stress.” Gordon Research Conference: Biology of Aging, 2009, Ventura, CA **\*\*Best Poster Award**
7. **Hussong, S.A.**, Kavanaugh, S.M., Roehrich, H., Kapphahn, R.J., Ferrington, D.A. “An Alternate Role for the Immunoproteasome in Retinal Stress Response.” The Association for Research in Vision and Ophthalmology (ARVO) 2009 Annual Meeting, Ft. Lauderdale, FL
8. **Hussong, S.A.**, Kapphahn, R.J., Roehrich, H., Maldonado, M., Pardue, M.T., Ferrington, D.A. “Decreased Retinal Function in Immunoproteasome-deficient Mice.” The Association for Research in Vision and Ophthalmology (ARVO) 2010 Annual Meeting, Ft. Lauderdale, FL
9. **Hussong, S.A.**, Kapphahn, R.J., Roehrich, H., Maldonado, M., Pardue, M.T., Ferrington, D.A. “Decreased Retinal Function in Immunoproteasome-deficient Mice.” Midwest Eye Research Symposium 2010, Iowa City, IA **\*\*Outstanding Poster Presentation**
10. **Hussong, S.A.**, Galvan, V. “Role of Neuronal mTOR in Aging” The American Aging Association 2011 Annual Meeting, Raleigh, NC
11. **Hussong, S.A.,** Galvan, V. Development of a Brain-specific Raptor Conditional Knock-out Mouse to Study the Role of Neuronal mTOR in Aging. San Antonio Nathan Shock Aging Center Conference on Aging 2011, Bandera, TX
12. **Hussong, S.A.**, Burbank, R.R., Halloran, J.J., Sloane, L.B., Soto, V., Galvan, V. “Development of a Brain-specific Raptor Conditional Knock-out Mouse to Study the Role of Neuronal mTOR in Aging.” Center for Biological Neurosciences Retreat, May 2012, UTHSCSA

**\*\*3rd Place Best Postdoctoral Poster Award**

1. **Hussong, S.A.**, Burbank, R.R., Halloran, J.J., Sloane, L.B., Soto, V., Lin, A., Galvan, V. “A Brain-specific Raptor Conditional Knock-out Mouse to Study the Role of Neuronal mTOR in Aging.” The American Aging Association 2012 Annual Meeting, Fort Worth, TX
2. **Hussong, S.A.**, Halloran, J.J., Burbank, R.R., Lin, A-L., Soto, V.Y., Galvan, V. Systemic Effects of Decreased Neuronal mTOR Signaling. San Antonio Nathan Shock Aging Center Conference on Aging 2012, Bandera, TX
3. **Hussong, S.A.**, Halloran, J.J., Burbank, R.R., Lin, A-L., Soto, V.Y., Galvan, V. Systemic Effects of Decreased Neuronal mTOR Signaling. 1st Annual Postdoctoral Research Forum and Distinguished Lecture 2013. **\*\*Research Poster Award, 3rd Place**
4. **Hussong, S.A.**, Burbank, R.R., Long, L., Soto, V.Y., Galvan, V. “Non-cell Autonomous Regulation of Body Size and Metabolism by Neuronal mTORC1” San Antonio Nathan Shock Aging Center Conference on Aging 2013, Bandera, TX
5. **Hussong, S.A.**, Halloran, J.J., Burbank, R.R., Lin, A-L., Soto, V.Y., Galvan, V. “Non-cell Autonomous Control of Metabolism by Neuronal mTOR Signaling.” American Aging Association Annual Meeting 2014, San Antonio, TX
6. **Hussong SA**, Burbank RR, Halloran JJ, Lin A-L., Soto, V.Y., and Galvan V., “Non-Cell Autonomous Control of Metabolism by Neuronal mTOR Signaling” 2nd Annual Postdoctoral Research Forum and Distinguished Lecture Sept. 2014 **\*\*San Antonio Life Sciences Institute Best Poster Presentation**
7. **Hussong, S.A.**, Halloran, J.J., Burbank, R.R., Lin, A-L., Soto, V.Y., Galvan, V. “Non-cell Autonomous Control of Metabolism by Neuronal mTOR Signaling. San Antonio Nathan Shock Aging Center Conference on Aging 2014, Bandera, TX
8. **Hussong, S.A.**, Halloran, J.J., Burbank, R.R., Lin, A-L., Soto, V.Y., Galvan, V. “Non-cell Autonomous Control of Metabolism by Neuronal mTOR Signaling.” Keystone Symposium on the Neural Control of Metabolic Physiology and Diseases, 2015, Snowbird, UT
9. **Hussong SA**, Burbank RR, Halloran JJ, Lin A-L., Soto, V.Y., and Galvan V., “Non-Cell Autonomous Control of Metabolism by Neuronal mTOR Signaling” 3rd Annual Postdoctoral Research Forum and Distinguished Lecture September 2015, UTHSCSA
10. **Hussong SA**, Burbank RR, Halloran JJ, Lin A-L., Soto, V.Y., and Galvan V., “Non-Cell Autonomous Control of Metabolism by Neuronal mTOR Signaling” San Antonio Nathan Shock Aging Center Conference on Aging 2015, Bandera, TX
11. **Hussong SA**, Burbank RR, Halloran JJ, Lin A-L., Soto, V.Y., and Galvan V. Here, There, and Everywhere: Disconnecting Healthspan from Lifespan by Knocking Down mTORC1 in Neurons. Symposium on Neurobiology and Neuroendocrinology of Aging, Center for Biological Neurosciences Retreat, May 2016, UTHSCSA
12. **Hussong SA**, Burbank RR, Halloran JJ, Lin A-L., Soto, V.Y., and Galvan V. Here, There, and Everywhere: Disconnecting Healthspan from Lifespan by Knocking Down mTORC1 in Neurons, Biology of Aging Student Day, May 2016, UTHSCSA
13. **Hussong, S.A.**, Galvan, V., mTORC1 Regulates AMPK-dependent eNOS Activation in Brain Vascular Endothelial Cells, Physiology Symposium, May 2016, UTHSCSA
14. **Hussong, S.A.**, Galvan, V., mTORC1 Regulates AMPK-dependent eNOS Activation in Brain Vascular Endothelial Cells, 45th Annual Meeting of the American Aging Association, June 2016, Seattle WA.

**\*\*Superior Postdoctoral Poster**

1. **Hussong SA**, Burbank RR, Halloran JJ, Lin A-L., Soto, V.Y., and Galvan V. “Here, There, and Everywhere: Disconnecting Healthspan from Lifespan by Knocking Down mTORC1 in Neurons.” Symposium on Neurobiology and Neuroendocrinology of Aging, July 2016, Bregenz, Austria
2. **Hussong SA**, Burbank RR, Halloran JJ, Lin A-L., Soto, V.Y., and Galvan V. “Here, There, and Everywhere: Disconnecting Healthspan from Lifespan by Knocking Down mTORC1 in Neurons.” Barshop Symposium on Aging, October 2016, Bandera, Texas
3. **Hussong, S.A.**, Hart, M.J., Kayed, R. Galvan, V. “Prion-like Propagation of Tau Oligomers Trigger Brain Vascular Endothelial Cell Dysfunction.” First Galveston Symposium on Alzheimer’s Disease & Related Disorders: Basic, Translational & Clinical Advances, March 2017, Galveston, Texas.
4. Olson, A., Jahrling, J. **Hussong, S.A.**, Galvan, V. “mTOR regulates brain vascular PICALM levels in a model of Alzheimer’s disease.” First Galveston Symposium on Alzheimer’s Disease & Related Disorders: Basic, Translational & Clinical Advances, March 2017, Galveston, Texas
5. Olson, A., Jahrling, J. **Hussong, S.A.**, Galvan, V. “mTOR regulates brain vascular PICALM levels in a model of Alzheimer’s disease.” Berlin Brain 2017, April 2017, Berlin, Germany
6. **Hussong, S.A.**, Hart, M.J., Kayed, R. Galvan, V. “Prion-like Propagation of Tau Oligomers Trigger Brain Vascular Endothelial Cell Dysfunction.” Institute for Integration of Medicine & Science 8th Annual Frontiers of Translational Science Research Day, April 2017, UT Health San Antonio
7. **Hussong, S.A.**, Hart, M.J., Kayed, R. Galvan, V. “Prion-like Propagation of Tau Oligomers Trigger Brain Vascular Endothelial Cell Dysfunction.” Edward J. Masoro Biology of Aging Student Day, April 2017, UT Health San Antonio
8. **Hussong, S.A.**, Hart, M.J., Kayed, R. Galvan, V. “Prion-like Propagation of Tau Oligomers Trigger Brain Vascular Endothelial Cell Dysfunction.” Center for Biological Neurosciences Retreat, May 2017, UT Health San Antonio
9. **Hussong S.A.**, Burbank R.R., Halloran J.J., Lin A-L.., Soto, V.Y., and Galvan V., “Non-Cell Autonomous Control of Metabolism by Neuronal mTOR Signaling” San Antonio Life Sciences Institute Aging & Neurodegenerative Diseases Symposium, July 2017 University of Texas at San Antonio
10. **Hussong, S.A.**, Van Skike, Candice, Olson, A.B., Hart, M.J., Kayed, R. Galvan, V. “Prion-like Propagation of Tau Oligomers Trigger Brain Vascular Endothelial Cell Dysfunction.” Barshop Symposium on Aging, October 2017, Bandera, Texas
11. **Hussong, S.A.**, Van Skike, Candice, Olson, A.B., Hart, M.J., Kayed, R. Galvan, V. “Prion-like Propagation of Tau Oligomers Trigger Brain Vascular Endothelial Cell Dysfunction.” Center for Biological Neurosciences Retreat, May 2018, UT Health San Antonio

**\*\*Outstanding Junior Faculty Poster Presentation**

1. **Hussong, S.A.**, Van Skike, Candice, Olson, A.B., Hart, M.J., Kayed, R. Galvan, V. “Prion-like Propagation of Tau Oligomers Trigger Brain Vascular Endothelial Cell Dysfunction.” 21st Annual Department of Medicine Research Day, May 2018, UT Health San Antonio

**\*\*Junior Faculty Poster Presentation Award**

1. **Hussong, S.A.**, Van Skike, Candice, Olson, A.B., Hart, M.J., Kayed, R. Galvan, V. “Prion-like Propagation of Tau Oligomers Trigger Brain Vascular Endothelial Cell Dysfunction.” 22nd Annual Department of Medicine Research Day, May 2019, UT Health San Antonio

**\*\*VA Non-Clinical Research – Faculty Poster Presentation Award**

1. **Hussong, S.A.** and Galvan, V. Age-related preservation of motor nerve conduction velocity in neuronal mTORC1 knockdown mice. 48th Annual Meeting of the American Aging Association, June 2019, San Francisco, CA.
2. **Hussong, S.A.** and Galvan, V. Age-related preservation of motor nerve conduction velocity in neuronal mTORC1 knockdown mice. Gerontological Society of America, November 2019, Austin, TX.

**MEMBERSHIP / COMMITTEES**

Association for Research in Vision and Ophthalmology 2006-2010

American Aging Association 2011-present

**UNDERGRADUATE RESEARCH**

Research Assistant, Project: “Effects of drying rates on lipid peroxidation in 2004-2005

*Pisum sativum* embryonic protoplasts,” Advisor: Karen L. Koster

**TEACHING AND TRAINEES**

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| --- | --- | --- | --- | --- |
| **Table 1: Trainees** | | | | |
| **Trainee** | **Program** | **Institution** | **Description** | **Date** |
| Shannon Kavanaugh | Undergraduate Research | University of Minnesota | Mentor/  Supervisor | 2007-2008 |
| Wendy Bratten | Undergraduate Research | University of Minnesota | Mentor/  Supervisor | 2008-2009 |
| Holly Stessman | Graduate Student | University of Minnesota | Mentor/  Supervisor | 2008 |
| Michael Burns | Graduate Student | University of Minnesota | Mentor/  Supervisor | 2008 |
| Peter Romero | Undergraduate Research/START-UP | St. Mary’s University, San Antonio/UTHSCSA | Mentor/  Supervisor | 2013-2014 |
| Celina Provencio | Undergraduate Research/START-UP | Trinity University, San Antonio/UTHSCSA | Mentor/  Supervisor | 2014 |
| Ethan Shelbourne-Dominguez | Voelcker Biomedical Research Program | Brooks Academy of Science and Engineering/UTHSCSA | Mentor/  Supervisor | 2014 |
| James Cuvillier | M-STAR (AFAR) | UTHSCSA Medical School | Mentor/  Supervisor | 2014-2015 |
| Brendan Langford | M-STAR (AFAR) | UTHSCSA Medical School | Mentor/  Supervisor | 2015 |
| Lea Morin | Voelcker Biomedical Research Program | Young Women’s Leadership Academy/UTHSCSA | Mentor/  Supervisor | 2014-2016 |
| Angela Olson | Graduate Student | UT Health San Antonio | Mentor/  Supervisor | 2015-2021 |
| Stephen Hernandez | Undergraduate Research/START-UP | University of Texas San Antonio/UTHSCSA | Mentor | 2016-2020 |
| Megan Reyna | Odyssey Scholarship Program | University of Chicago | Mentor/ Supervisor | 2017 |
| Andy Banh | M.D./Ph.D. Graduate Student | UTHSCSA | Mentor | 2017-2021 |
| Marina Brown | Graduate Student | OUHSC | Mentor | 2021-2022 |
| Haneen Makhlouf | Graduate Student | OUHSC | Mentor | 2022-present |
| Tristen Unruh-Cone | Graduate Student | OUHSC | Mentor/  Supervisor | 2022 |

**Classroom Instruction**

* Laboratory in Biochemistry, BIOC 4025. Teaching Assistant. Conducted 2008-2009

laboratory experiments, wrote quiz questions, prepared overviews of procedures with supporting background materials, and graded laboratory reports

(University of Minnesota)

* IBMS 5000 Fundamentals of Biomedical Sciences, laboratory demonstration 2014-2016

lecturer/assistant. Guided and lectured the laboratory demonstration class.

* Advance Cell Biology II – Advanced Cell Signaling, CELL 6121. Prepared and Spring 2022

presented a lecture on mTOR signaling. This lecture covered the basic mTOR

signaling pathway as well as the effects of mTOR on aging organisms and

disease model systems.

**SERVICE**

Ad hoc reviewer, *Journal of Alzheimer’s Disease* 2011-present

Ad hoc reviewer, *Journal of Gerontology* 2012-present

Alzheimer’s Association TrialMatch station, Walk to End Alzheimer’s 2014-2015

Update on Research at the Galvan Lab, Presentation and Lunch, Ms. Lisa Bailey 2015-present

Ad hoc reviewer, *GeroScience*-*Journal of the American Aging Association* 2016 - present

Ad hoc reviewer, *Journal of Integrative Neuroscience* 2018 – present

Ad hoc reviewer, *Scientific Reports* 2018 – present

Ad hoc reviewer, *Journal of Nutrition and Healthy Aging* 2018 – present

Editorial board member, *Frontiers in Aging: Interventions in Aging* 2020-present

Editorial board member, *GeroScience* 2022-present

**RESEARCH SUPPORT**

**Current**

1 IK2 BX003798-01A1 (Hussong)

Veterans Administration Career Development Award (CDA-2) 04/01/2018-9/30/2023

*The Role of Neuronal mTORC1 in Alzheimer’s Disease*

The goal of this project is to define the contribution of neuronal-driven mTOR-dependent mechanisms of Alzheimer’s disease pathogenesis by measuring cognitive behaviors, synaptic function, and vascular

function.

**Completed**

1 I01 BX002211-01A2 (Galvan) 01/26/15–01/25/19

Veterans Administration Research and Development Merit Award

*Inhibiting the TOR Pathway to Combat Alzheimer's Disease*

Goals of this project are to establish the therapeutic potential for rapamycin or other TOR inhibitors in the treatment of Alzheimer’s disease (AD) and to determine rapamycin’s mechanisms of action in AD brain.

Role: Key Personnel

OWENS FUND 2014 (Galvan) 03/01/14-02/28/15

William & Ella Owens Medical Research Foundation

*Rapamycin as a therapy for vascular damage in Alzheimer’s disease*

The goal of this project is to determine whether rapamycin maintains memory in AD mice by blocking

Aβ-induced vessel damage.

Role: Postdoctoral Fellow

AG-NS-0726-10 (Galvan) 08/01/10-07/31/14

Ellison Medical Foundation – New Scholar Award in Aging

*Neuronal mTOR in Mammalian Aging*

The goal of this project is to determine the role of mTOR signaling from the nervous system in the

control of aging in mammals.

Role: Key Personnel

T32 AG021890(Austad, Strong) 11/01/10-10/31/13

NIH/NIA

Training Grant: Biology of Aging

This grant supports the training of pre-doctoral and postdoctoral fellows in aging research.

Role: Postdoctoral trainee

T32 AG029796 (Thompson, Ferrington) 03/01/08-02/29/10

NIH/NIA

Training Grant: Functional Proteomics of Aging

This grant supports the training of pre-doctoral and postdoctoral fellows in aging research.

Role: Pre-doctoral trainee