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CIRRICULUM VITAE

NAME: Daniel C. Lee, Ph.D.
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EDUCATION

1995-1999	B.S. Chemistry	Lincoln University, Lincoln University, PA (S. SubbaRao)
1999-2005	Ph.D. Pharmaceutical Sciences	Florida A&M University College of Pharmacy & Pharmaceutical Science, Tallahassee, FL Major Professor: (Donald E. Palm)
2005	Post-doctoral fellow/ <i>Neuroscience</i>	University of South Florida College of Medicine Tampa, FL PIs: Dave Morgan; Marcia Gordon

ACADEMIC APPOINTMENTS

2010	Assistant Professor (<i>Founding Faculty</i>)	Dept. Pharmaceutical Sciences College of Pharmacy, University of South Florida, Byrd Alzheimer's Institute
2017	Associate Professor (<i>Tenured</i>)	Dept. Pharmaceutical Sciences College of Pharmacy, University of South Florida, Byrd Alzheimer's Institute
2018	Director of Neurodegenerative Sciences	College of Pharmacy, University of South Florida
2018	Appointed Endowment: William N. Sanders Chair in Geriatric Pharmacotherapy	College of Pharmacy, University of South Florida
2019	Adjunct Associate Professor	College of Medicine, University of South Florida, Dept. Molecular Medicine
2019	Associate Professor (<i>Tenured</i>)	College of Medicine, University of Kentucky, Sanders-Brown Center on Aging, Dept. Neuroscience
2020	Co-Director of UK-ADRC REC	University of Kentucky Sanders-Brown Center on Aging Research Education Component (REC)

RESEARCH INTEREST

Neuroinflammation, Alzheimer's disease, Parkinson's disease, Aging, Proteases/ Protease inhibitors, Apoptosis, Microglia activation, tauopathies, synucleinopathies, and Amyloid beta pathology, Gene therapy, Arginine metabolism, Arginine sensing, Polyamine Biology, GPRC6a receptors, mTORC1 signaling

Dissertation Title: Cystatin C and lysosomal protease alterations following 6-hydroxydopamine induced oxidative stress: Implications in the pathogenesis of Parkinson's disease

RELEVANT WORK EXPERIENCE

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1996-1998	Medical Laboratory Assistant	VA Medical Center, Coatesville, PA Hematology, Microbiology, Chemistry, Pathology, Radiology
1998	Undergraduate Training	Institute for Cellular Therapeutics, Philadelphia, PA Cancer, Apoptosis
1998-99	Pharmacy Technician	Target Pharmacy Exton, PA Prescriptions, inventory, drug preparations
2003	Graduate Intern Training	Eli Lilly & Company, Indianapolis IN Models of Inflammation, small animal pharmacology
2000-05	Teacher Assistant (lab)	Florida A&M University, FL Teach Lab, Pharmacology, Anatomy & Physiology

HONORS, AWARDS & RECOGNITIONS

2017	Dean's Recognition Award USF College of Pharmacy
2016	USF College of Pharmacy Best Researcher Award 2016
2016	USF College of Pharmacy Teacher of the Year 2016 (Voted on by class '2019)
2015	Dean's Recognition Award (Pharmacology Coordination Efforts)
2013	USF College of Pharmacy Teacher of the Year 2013 (2 nd Place recognition)
2009	USF Research Interdisciplinary Postdoctoral Scholar Outstanding Presentation Award, <i>Symposium Winner 2/20/09</i>
2009	American Society for Neural Therapy and Repair Travel Award
2008	International Conference for Alzheimer's disease Travel Award
2008	USF Research Interdisciplinary Postdoctoral Scholar Outstanding Presentation Award, <i>Symposium Winner 2/22/08</i>
2008	American Society for Neural Therapy and Repair Travel Award
2007	USF Research Interdisciplinary Postdoctoral Scholar Outstanding Presentation Award, <i>Symposium Winner 2/23/07</i>
2005	FASEB MARC Travel Award Experimental Biology Conference
2004	Florida A&M University MBRS Research <i>Symposium Winner 11/06/04</i>
2004	FASEB MARC Travel Award Experimental Biology Conference
2004	Florida A&M University Community Service Award
2003	FASEB Grantsmanship Training Program Travel Award Tucson, AZ
2003	American Physiological Society Travel Award Experimental Biology Conference
2002	Florida A&M University MBRS Research <i>Symposium Winner 11/08/02</i>
2002	FASEB MARC Travel Award Experimental Biology Conference
1998	Beta Kappa Chi Honorary Scientific Society
1996-99	National Dean's Lists
1995-99	LASER Fellow (Lincoln's Advanced Science & Engineering Reinforcement)
1998-99	MARC Fellow (Minority Access to Research Career)
1998	Alfred P. Sloan Award
1997	Lincoln University's Combined Fund No.1 Award

RESEARCH

GRANTS FUNDED Active/ Completed

Total Awards as Primary (PI): \$4,059,695.00

2011-2013	"The Impact of Polyamines in Animal Models of Tauopathy and Parkinson's disease" Principal Investigator (DC Lee) , USF New Researcher Grant (<u>\$20,000</u>): Completed
2012-2016	"Impact of Arginase-1 Deficiency on Tau and Amyloid Pathology" Principal Investigator (DC Lee) , Alzheimer's Association: (MNIRGD-12-242665) (<u>\$150,000</u>): Completed

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- 2014-2015 “Validation of SAT1 and Polyamines in modifying alpha synuclein pathology” **Principal Investigator (DC Lee)** Michael J. Fox Foundation (\$125,000): Completed
- 2014-2017 “Impact of Arginase1 overexpression and SAT1 deficiency during tauopathies” **Principal Investigator (DC Lee)**, CurePSP Foundation for PSP/ CBD#520-14 (\$100,000): Completed
- 2015-2016 “Modulation of Arginine Metabolism and Polyamines to Mitigate Alzheimer’s disease Pathology” **Principal Investigator (DC Lee)** Florida Department of Health -Ed and Ethel Moore Alzheimer’s disease-#5AZ11 (\$112,500); Completed
- 2015-2019 Polyamine and Arginine Metabolism Impact Tauopathies **Principal Investigator (DC Lee)** Bright Focus Foundation-A20155045 (\$250,000) Completed
- 2016-2018 Brain permeable non-immunosuppressive dual-acting inhibitors of two disease-modifying targets FKBP12/52 **Co- Principal Investigator (DC Lee); Co- Principal Investigator (U Jinwal) Grant ID: 11550** Michael J. Fox Foundation& CalAsia Inc (\$670,865 total; \$145,065 to USF): Completed
- 2016-2021 “Influence of systemic immune inflammation upon the tauopathy phenotype in mouse models” **R01 AG051500. Principal Investigator (D Morgan); Co- Investigator (DC Lee-5% Effort yr1-no further effort) Co-I: ML Selenica, Co-I: M Gordon; Co-I: K Nash; Co-I: P Bickford; Co-I: C Cao; Co-I: K Ugen; Co-I: S Stevens. (\$3,732,550): Active-no further effort from relocation**
- 2017-2020 “Modulation of GPRC6a Signaling to Mitigate Tauopathies” **Principal Investigator (DC Lee)**, Alzheimer’s Association: (AARGD-16-441534) (\$150,000): Active NCE
- 2017-2022 “Emerging Roles of Higher-order Polyamines During Tauopathies” **Principal Investigator (DC Lee), NIH/ NIA R01AG054559, (\$2,396,005): Active**
- 2018-2021 “Exploiting GPRC6a Antagonists to Mitigate Tau Deposition” **Principal Investigator (DC Lee); Florida Department of Health -Ed and Ethel Moore Alzheimer’s disease-8AZ30 (\$200,000) Active**
- 2018-2020 “Understanding the Role GPRC6a During Tau Metabolism” **Principal Investigator (DC Lee) Co-I: K Nash; Co-I: S Varghese-Gupta NIH/ NIA R21AG055996, (\$411,125): Active-NCE**
- 2019-2020 “Crosstalk of circadian rhythm dysfunction and PA metabolism in AD” **Co- Principal Investigator (DC Lee); Co- Principal Investigator (J Gamsby) USF Morsani College of Medicine University of South Florida; Interdisciplinary Seed Grant (\$50,000): Completed**
- 2020-2022 “PAD4 promotes tau citrullination and pathology in Alzheimer’s disease” Principle Investigator (MLB-Selenica; **Co- Investigator (DC Lee-3% effort) CART Rotary, (\$125,000) Active**

NIH GRANTS SUBMITTED PENDING 2020

R01 AG072728 (PI: Lee) NIH/NIA 04/01/20-03/31/26

Emerging Role of Tau Citrullination During Alzheimer’s disease and Tauopathies

Goal: This study aims to investigate the role of PAD4 and tau citrullination during tau models.

Score: 30 Impact; 15% tile- To be Paid

R01 NS123454 (PI: Selenica) NIH/NIA 7/1/21-6/30/26

TDP-43 Citrullination: Mechanisms underlying TDP43 aggregation and pathology through protein

Goal: This study aims to investigate the role of PAD4 and TDP43 citrullination during FTD models.

Role: Co-I

Score: Under Review

P30 AG028383 (PI: Van Eldik, L.) NIH/NIA 7/1/21-6/30/26

University of Kentucky Alzheimer’s Disease Research Center

Goal UK-ADRC is: Transitions from Normal to Late-Life Multi-Etiology Dementia. Our well-characterized, longitudinal cohort and historically strong neuropathology program focused on normal aging, preclinical disease states and early cognitive transitions have been central to our success in defining early pathogenic mechanisms underlying the transitions from normal cognitive aging to impairment. These efforts have been a driving force in our recognition of the heterogeneity and multiple pathologies that characterize late-life dementia.

Role: Co-Leader REC

Score: 20 Impact

PUBLICATIONS (Refereed journal articles in chronological order)

1. **Lee DC**, Close FT, Goodman CB, Jackson IM, Wight-Mason C, Wells LM, Womble TA, Palm DE. Enhanced cystatin C and lysosomal protease expression following 6-hydroxydopamine exposure. *Neurotoxicology*. 2006 Mar;27(2):260-76. Epub 2006 Jan 18. PubMed PMID: 16414118.
2. **Lee DC**, Womble TA, Mason CW, Jackson IM, Lamango NS, Severs WB, Palm DE. 6-Hydroxydopamine induces cystatin C-mediated cysteine protease suppression and cathepsin D activation. *Neurochem Int*. 2007 Mar;50(4):607-18. Epub 2006 Dec 21. PubMed PMID: 17241700.
3. **Lee DC**, Mason CW, Goodman CB, Holder MS, Kirksey OW, Womble TA, Severs WB, Palm DE. Hydrogen peroxide induces lysosomal protease alterations in PC12 cells. *Neurochem Res*. 2007 Sep;32(9):1499-510. Epub 2007 Apr 18. PubMed PMID: 17440810.
4. Carty NC, Nash K, **Lee D**, Mercer M, Gottschall PE, Meyers C, Muzyczka N, Gordon MN, Morgan D. Adeno-associated viral (AAV) serotype 5 vector mediated gene delivery of endothelin-converting enzyme reduces Abeta deposits in APP + PS1 transgenic mice. *Mol Ther*. 2008 Sep;16(9):1580-6. doi: 10.1038/mt.2008.148. Epub 2008 Jul 29. PubMed PMID: 18665160; PubMed Central PMCID: PMC2706523.
5. Dickey C, Kraft C, Jinwal U, Koren J, Johnson A, Anderson L, Lebson L, **Lee D**, Dickson D, de Silva R, Binder LI, Morgan D, Lewis J. Aging analysis reveals slowed tau turnover and enhanced stress response in a mouse model of tauopathy. *Am J Pathol*. 2009 Jan;174(1):228-38. doi: 10.2353/ajpath.2009.080764. Epub 2008 Dec 12. PubMed PMID: 19074615; PubMed Central PMCID: PMC2631335.
6. Koren J 3rd, Jinwal UK, **Lee DC**, Jones JR, Shults CL, Johnson AG, Anderson LJ, Dickey CA. Chaperone signalling complexes in Alzheimer's disease. *J Cell Mol Med*. 2009 Apr;13(4):619-30. Review. PubMed PMID: 19449461; PubMed Central PMCID: PMC2749087.
7. Jinwal UK, Miyata Y, Koren J 3rd, Jones JR, Trotter JH, Chang L, O'Leary J, Morgan D, **Lee DC**, Shults CL, Rousaki A, Weeber EJ, Zuiderweg ER, Gestwicki JE, Dickey CA. Chemical manipulation of hsp70 ATPase activity regulates tau stability. *J Neurosci*. 2009 Sep 30;29(39):12079-88. doi: 10.1523/JNEUROSCI.3345-09.2009. PubMed PMID: 19793966; PubMed Central PMCID: PMC2775811.
8. Lebson L, Nash K, Kamath S, Herber D, Carty N, **Lee DC**, Li Q, Szekeres K, Jinwal U, Koren J, Dickey CA, Gottschall PE, Morgan D, Gordon MN. Trafficking CD11b-positive blood cells deliver therapeutic genes to the brain of amyloid-depositing transgenic mice. *J Neurosci*. 2010 Jul 21;30(29):9651-8. doi: 10.1523/JNEUROSCI.0329-10.2010. PubMed PMID: 20660248; PubMed Central PMCID: PMC2929651.
9. **Lee DC**, Rizer J, Selenica ML, Reid P, Kraft C, Johnson A, Blair L, Gordon MN, Dickey CA, Morgan D. LPS- induced inflammation exacerbates phospho-tau pathology in rTg4510 mice. *J Neuroinflammation*. 2010 Sep 16;7:56. doi: 10.1186/1742-2094-7-56. PubMed PMID: 20846376; PubMed Central PMCID: PMC2949628.
10. Carty N, **Lee D**, Dickey C, Ceballos-Diaz C, Jansen-West K, Golde TE, Gordon MN, Morgan D, Nash K. Convection-enhanced delivery and systemic mannitol increase gene product distribution of AAV vectors 5, 8, and 9 and increase gene product in the adult mouse brain. *J Neurosci Methods*. 2010 Dec 15;194(1):144-53. doi: 10.1016/j.jneumeth.2010.10.010. Epub 2010 Oct 15. PubMed PMID: 20951738; PubMed Central PMCID: PMC2995441.
11. Li Q, Lebson L, **Lee DC**, Nash K, Grimm J, Rosenthal A, Selenica ML, Morgan D, Gordon MN. Chronological age impacts immunotherapy and monocyte uptake independent of amyloid load. *J Neuroimmune Pharmacol*. 2012 Mar;7(1):202-14. doi: 10.1007/s11481-011-9329-9. Epub 2011 Dec 27. PubMed PMID: 22198698.
12. Carty N, Nash KR, Brownlow M, Cruite D, Wilcock D, Selenica ML, Lee DC, Gordon MN, Morgan D. Intracranial injection of AAV expressing NEP but not IDE reduces amyloid pathology in APP+PS1 transgenic mice. *PLoS One*. 2013;8(3):e59626. doi: 10.1371/journal.pone.0059626. Epub 2013 Mar 28. PubMed PMID: 23555730; PubMed Central PMCID: PMC3610740.

13. Selenica ML, Brownlow M, Jimenez JP, **Lee DC**, Pena G, Dickey CA, Gordon MN, Morgan D. Amyloid oligomers exacerbate tau pathology in a mouse model of tauopathy. *Neurodegener Dis.* 2013;11(4):165-81. doi: 10.1159/000337230. Epub 2012 Jul 10. PubMed PMID: 22796753; PubMed Central PMCID: PMC3739054.
14. **Lee DC**, Rizer J, Hunt JB, Selenica ML, Gordon MN, Morgan D. Review: experimental manipulations of microglia in mouse models of Alzheimer's pathology: activation reduces amyloid but hastens tau pathology. *Neuropathol Appl Neurobiol.* 2013 Feb;39(1):69-85. doi: 10.1111/nan.12002. Review. PubMed PMID: 23171029; PubMed Central PMCID: PMC4300851.
15. **Lee DC**, Ruiz CR, Lebson L, Selenica ML, Rizer J, Hunt JB Jr, Rojiani R, Reid P, Kammath S, Nash K, Dickey CA, Gordon M, Morgan D. Aging enhances classical activation but mitigates alternative activation in the central nervous system. *Neurobiol Aging.* 2013 Jun;34(6):1610-20. doi: 10.1016/j.neurobiolaging.2012.12.014. PubMed PMID: 23481567; PubMed Central PMCID: PMC3652232.
16. Nash KR, **Lee DC**, Hunt JB Jr, Morganti JM, Selenica ML, Moran P, Reid P, Brownlow M, Guang-Yu Yang C, Savalia M, Gemma C, Bickford PC, Gordon MN, Morgan D. Fractalkine overexpression suppresses tau pathology in a mouse model of tauopathy. *Neurobiol Aging.* 2013 Jun;34(6):1540-8. doi: 10.1016/j.neurobiolaging.2012.12.011. Epub 2013 Jan 16. PubMed PMID: 23332170.
17. Selenica ML, Alvarez JA, Nash KR, **Lee DC**, Cao C, Lin X, Reid P, Mouton PR, Morgan D, Gordon MN. Diverse activation of microglia by chemokine (C-C motif) ligand 2 overexpression in brain. *J Neuroinflammation.* 2013 Jul 17;10:86. doi: 10.1186/1742-2094-10-86. PubMed PMID: 23866683; PubMed Central PMCID: PMC3726363.
18. Selenica MLB, Benner L, Housley SB, Manchec B, **Lee DC**, Nash KR, Kailin J, Bergman JA, Kozikowski A, Gordon MN, Morgan D. Histone deacetylase 6 inhibition improves memory and reduces total tau levels in a mouse model of tau deposition. *Alzheimer's Res Ther.* 2014 Feb 27;6(1)12. doi: 10.1186/alzrt241.
19. Selenica ML, Davtyan H, Housley SB, Blair LJ, Gillies A, Nordhues BA, Zhang B, Liu J, Gestwicki JE, Lee DC, Gordon MN, Morgan D, Dickey CA. Epitope analysis following active immunization with tau proteins reveals immunogens implicated in tau pathogenesis. *J Neuroinflammation.* 2014 Sep 3;11:152. doi: 10.1186/s12974-014-0152-0. PubMed PMID: 25183004; PubMed Central PMCID: PMC4167523.
20. Narayan, M, Zhang J, Braswell K, **Lee DC**, Varghese-Gupta S, Jinwal U. Withaferin A Regulates LRRK2 levels by interfering with HSP90-CDC37 Complex. *Curr Aging Sci.* 2015;8(3):259-65. PMID: 25989799.
21. Hunt JB Jr, Nash KR, Placides D, Moran P, Selenica ML, Abuqalbeen F, Ratnasamy K, Slouha N, Rodriguez-Ospina S, Savlia M, Ranaweera Y, Reid P, Dickey CA, Urcia R, Yang CG, Sandusky LA, Gordon MN, Morgan D, **Lee DC**. Sustained Arginase 1 Expression Modulates Pathological Tau Deposits in a Mouse Model of Tauopathy. *J Neurosci.* 2015 Nov 4;35(44):14842-60. doi: 10.1523/JNEUROSCI.3959-14.2015. PubMed PMID: 26538654.
22. Sabbagh JJ, Fontaine SN, Shelton LB, Blair LJ, Hunt JB Jr, Zhang B, Gutmann JM, **Lee DC**, Lloyd JD, Dickey CA. Noncontact Rotational Head Injury Produces Transient Cognitive Deficits but Lasting Neuropathological Changes. *J Neurotrauma.* 2016 Mar 16. [Epub ahead of print] PubMed PMID: 26739819.
23. Selenica ML, Reid P, Pena G, Alvarez J, Hunt JB Jr, Nash KR, Morgan D, Gordon MN, **Lee DC**. Adeno associated viral-mediated intraosseous labeling of bone marrow derived cells for CNS tracking. *J Immunol Methods.* 2016 May;432:51-6. doi: 10.1016/j.jim.2016.01.008. Epub 2016 Jan 16. PubMed PMID: 26784524; PubMed Central PMCID: PMC4852145.
24. Heneka M, Andreasson KI, Bachstetter AD, Colonna M, Ginhoux F, Holmes C, Lamb B, Landreth G, **Lee DC**, Low D, Lynch MA, Monsonogo A, O'Banion MK, Pekny M, Puschmann T, Russek-Blum N, Sandusky LA, Selenica MB, Takata K, Teeling J, Town T, Van Eldik LJ, Schulz JB. Targeting innate immunity for neurodegenerative disorders of the central nervous system. *J Neurochem.* 2016 Jun 1. doi: 10.1111/jnc.13667. [Epub ahead of print] Review. PubMed PMID: 272480 **Corresponding equal authorship.*
25. Grewal R, Haghigi M, Huang S, Smith AG, Cao C, Lin X; Lee DC, Teten N, Hill AM, Selenica MLB, Identifying biomarkers of dementia prevalent among amnesic MCI ethnic female patients. *Alzheimers Res & Ther.* 2016 Oct 18; 8(1):43

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26. Delic V, Griffin JWD, Zivkovic S, Zhang Y, Phan TA, Gong H, Chaput D, Reynes C, Dinh VB, Cruz J, Cvitkovic E, Placides D, Frederic E, Mirzaei H, Stevens SMjr, Jinwal U, **Lee DC**, Bradshaw PC. Individual Amino Acid Supplementation Can Improve Energy Metabolism and Decrease ROS Production in Neuronal Cells Overexpressing Alpha-Synuclein. *Neuromolecular Med.* 2017 Jun 15. doi: 10.1007/s12017-017-8448-8. [Epub ahead of print]
27. Vemula P, Jing Y, Zhang H, Hunt JB, Sandusky-Beltran LA, **Lee DC**, Liu P. Altered brain arginine metabolism in a mouse model of tauopathy *Amino Acids.* 2019 Jan 2. doi: 10.1007/s00726-018-02687-x
28. Sandusky-Beltran LA, Kovalenko A, Ma C, Calahatian JIT, Placides DS, Watler MD, Hunt JB, Darling AL, Baker JD, Blair LJ, Martin MD, Fontaine SN, Dickey CA, Lussier AL, Weeber EJ, Selenica MB, Nash KR, Gordon MN, Morgan D, **Lee DC**. Spermidine/spermine-N¹-acetyltransferase ablation impacts tauopathy-induced polyamine stress response. *Alzheimers Res Ther.* 2019 Jun 29;11(1):58. doi: 10.1186/s13195-019-0507-y. PubMed PMID: 31253191; PubMed Central PMCID: PMC6599347.
29. Joly-Amado A, Hunter J, Quadri Z, Zamudio F, Rocha-Rangel PV, Chan D, Kesarwani A, Nash K, **Lee DC**, Morgan D, Gordon MN, Selenica MB. CCL2 Overexpression in the Brain Promotes Glial Activation and Accelerates Tau Pathology in a Mouse Model of Tauopathy. *Front Immunol.* 2020;11:997. doi: 10.3389/fimmu.2020.00997. eCollection 2020. PubMed PMID: 32508844; PubMed Central PMCID: PMC7251073.
30. Quadri Z, Johnson N, Zamudio F, Miller A, Peters M, Smeltzer S, Hunt JB Jr, Housley SB, Brown B, Kraner S, Norris CM, Nash K, Weeber E, **Lee DC**, Selenica MB. Overexpression of human wtTDP-43 causes impairment in hippocampal plasticity and behavioral deficits in CAMKII-tTa transgenic mouse model. *Mol Cell Neurosci.* 2020 Jan;102:103418. doi: 10.1016/j.mcn.2019.103418. Epub 2019 Nov 6. PubMed PMID: 31705957.
31. Ma C, Hunt JB, Selenica MLB, Sanneh A, Sandusky-Beltran LA, Watler M, Daas R, Kovalenko A, Liang H, Placides D, Cao C, Lin X, Orr MB, Zhang B, Gensel JC, Feola DJ, Gordon MN, Morgan D, Paula C. Bickford PC, **Lee DC**. Arginase 1 Insufficiency Precipitates Amyloid- β Deposition and Hastens Behavioral Impairment in a Mouse Model of Amyloidosis **Front Immunol 2021 Jan** doi.org/10.3389/fimmu.2020.582998.
32. Smeltzer S, Quadri Z, Miller A, Zamudio F, Hunter J, Stewart NJF, Saji S, **Lee DC**, Chaput D, Selenica MB. Hypusination of Eif5a regulates cytoplasmic TDP-43 aggregation and accumulation in a stress-induced cellular model. *Biochim Biophys Acta Mol Basis Dis.* 2021 Jan 1;1867(1):165939. doi: 10.1016/j.bbadis.2020.165939. Epub 2020 Aug 31.
33. Zamudio F, Loon AR, Smeltzer S, Benyamine K, Navalpur Shanmugam NK, Stewart NJF, **Lee DC**, Nash K, Selenica MB. TDP-43 mediated blood-brain barrier permeability and leukocyte infiltration promote neurodegeneration in a low-grade systemic inflammation mouse model. *J Neuroinflammation.* 2020 Sep 26;17(1):283. doi: 10.1186/s12974-020-01952-9.
34. Sandusky-Beltran LA, Kovalenko A, Placides D, Ratnasamy K, Ma C, Hunt JB, Liang H, John Ivan T. Calahatian JIT, Michalski C, Fahnestock M, Blair LJ, Darling AL, BakerJD, Fontaine SN, Dickey CA, Gamsby JJ, Nash KR, Abner E, Selenica MLB, **Lee DC**. Aberrant *AZIN2* and polyamine metabolism precipitates tau neuropathology. *J. Clin Invest.* 2021;131(4):e126299. <https://doi.org/10.1172/JCI126299>.
35. Sanneh A, Housley BS, Nash K, Zamudio F, Loon A, Manchec B, Liu J, Lee DC, Morgan D, Gordon MN, Selenica MLB. Pathology and propagation of C-terminal truncated tau and Full length tau in wild type mice. (**Revision: Journal of Neurobiology of Disease**)
36. Ma C, Hunt JB, Kovalenko A, Liang H, Selenica MLB, Orr MB, Zhang B, Gensel JC, Feola DJ, Gordon MN, Morgan D, Bickford PC, Lee DC. Haploinsufficiency of Arginase 1 in Lysozyme M Cells Activates Amyloid- β Plaque Associated Glial Genes in a Mouse Model of Alzheimer's Disease. *Front Immunol.* **Under revision.**

MyBio Full Bibliography:

https://www.ncbi.nlm.nih.gov/myncbi/1Ne15ngv_apQj/bibliography/public/

ABSTRACTS (International Meetings/ University Winning Poster ONLY)

1. **Lee, D. C.**, Palm, D. E., Jackson, I. M., Womble, T., Wight, C., (2002) Cystatin C expression in apoptotic PC12 cells following 6-hydroxydopamine toxicity. Society for Neuroscience Conference Abs# 194.12
2. Jackson, I. M., Ghandi, S., Womble, T., **Lee, D. C.**, Wight, C., Palm, D., (2002) Kanic acid induced protease expression in rat hippocampus. Society for Neuroscience Conference Abs# 833.3
3. **Lee, D. C.**, Womble, T., Jackson, I., Wight, C., Palm, D. E., (2002) Cystatin C expression in PC12 cells following 6-hydroxydopamine toxicity. Experimental Biology Conference Abs# LB255
4. Womble, T., **Lee, D. C.**, Jackson, I., Wight, C., Palm, D. E., (2002) The regulatory role of aspartic and cysteine proteases during apoptosis of PC12 cells and neuroblastoma cells following serum deprivation. Experimental Biology Conference Abs# LB251
5. **Lee, D. C.**, Womble, T., Jackson, I., Mason, C., Palm, D. E. (2003) Cystatin C and caspase involvement in 6-hydroxydopamine induced apoptosis in PC12 cells. Society for Neuroscience Conference Abs# 409.15
6. **Lee, D. C.**, Jackson, I., Wight, C.A., Womble, T., Palm, D. E., (2003) Characterization of cystatin C and protease expression following 6-hydroxydopamine exposure in apoptotic PC12 cells. Experimental Biology Conference Abs# 388.18
7. Womble, T., **Lee, D. C.**, Jackson, I. M., Wight, C. A., Palm, D. E., (2003) Characterization of aspartic and cysteine proteases following TNF- α -induced apoptosis of PC12 cells. Experimental Biology Conference Abs# 392.4
8. Jackson, I. M., **Lee, D. C.**, Wight, C., A., Womble. T., Walker, M. D., Palm, D. E., (2003) Kanic acid induced protease expression in human SH-SY5Y human neuroblastoma cells. Experimental Biology Conference Abs# 392.9
9. Wight, C. A., Jackson, I. M., **Lee, D. C.**, Womble, T., Palm, D. E., (2003) Co-localization of cystatin C and insulin in pancreatic tissue of Sprague Dawley rats. Experimental Biology Conference Abs# 604.4
10. **Lee, D. C.**, Johnson, I., Womble, T., Mason, C., Palm, D.E. (2004) Oxidative stress induced alterations in cysteine and aspartic proteases in PC12 cells. Society for Neuroscience Conference Abs# 93.2
11. Mason, C., **Lee, D. C.**, Womble, T., Johnson, I., Palm, D., (2005) Alterations in cystatin C and cathepsin B expression following MDMA-induced apoptosis of differentiated PC12 cells. Experimental Biology Conference Abs# 943.5
12. **Lee, D. C.**, Lebson, L., Morgan, D., Gordon M., (2006). Phenotyping cytokine-induced microglia activation in mouse CNS. Society for Neuroscience Abs# 386.2
13. Womble, T.A., **Lee, D.C.**, Jackson, I.N., Mason, C.A., Smith, B.A., Anderson, N., Palm, D.E., (2006) An intermediate pathway of cell death involving cathepsin D during tumor necrosis factor-A-induced apoptosis. Exp. Neurol. 198 558–597. Published Abstract. American Society for Neural Therapy & Repair
14. **Lee, D. C.**, Palm, D. E. (2006) Cathepsin D expression and activity is increased following 6-OHDA exposure and lysosomal cysteine protease suppression. Exp. Neurol. 198 558-597. Published Abstract. American Society for Neural Therapy & Repair
15. **Lee, D. C.**, Lebson, L., Morgan, D., Gordon M., (2007). Gene expression changes in the mouse hippocampus following polarization towards classical or alternative microglial activation bias. Society for Neuroscience Abs# 804.12
16. **Lee, D. C.**, Lebson, L., Mercer, M., Morgan, D., Gordon M., (2007) Age-related classical and alternative activation of microglia in mouse CNS. Exp. Neurol. 16 (3)331. Published Abstract. American Society for Neural Therapy & Repair
17. **Lee, D. C.**, Lebson, L., Morgan, D., Gordon M., (2008) Age-induced changes in classical and alternatively activated gene expression profiles following polarization of microglia in mouse CNS. Society for Neuroscience Abs# 154.18
18. **Lee, D. C.**, Morgan, D., Gordon M., (2008) Polarization of microglia modifies amyloid pathology in APP Tg2576 mice. International Conference for Alzheimer's Disease Abs# P3-365.
19. **Lee, D. C.**, Lebson, L., Morgan, D., Gordon M., (2008) Selective gene expression changes following polarization towards classical or alternative activation of microglia in mouse CNS American Society for Neural Therapy & Repair
20. Selenica, M. L., Brownlow, L. M., **Lee, D. C.**, Dickey, C. A., Gordon, M., Morgan D., (2009) A β 1-42 oligomers aggravate phosphorylation of tau in rTg4510 mouse model. Society for Neuroscience Abs# 826.2

21. **Lee, D. C.**, Rizer, J., Selenica, M. L., Kraft, C., Johnson, A., Anderson, L., Gordon, M. N., Dickey, C. A., Morgan, D. (2009) Increased tau pathology following lipopolysaccharide injections. Society for Neuroscience Abs# 44.6
22. Williams, D. E., **Lee, D. C.**, Gordon, M. N., Morgan, D. G. (2009) Exaggerated neuroinflammation in NOS2^{-/-} knock-out mice. Society for Neuroscience Abs# 338.19.
23. Daily, J. L., **Lee, D. C.**, Golde, T., Weeber, E. (2009) Adeno-associated virus-mediated expression of Ube3a in the adult hippocampus of an Angelman syndrome mouse model Society for Neuroscience Abs# 328.18
24. Jinwal, U. K., Miyata, Y., Koren III, J., Jones, J. R., Trotter, J. H., Chang, L., O'Leary, L., Morgan, D., **Lee, D. C.**, Shults, C. L., Rousaki, A., Weeber, E. J., Zuiderweg, E. R. P., Gestwicki, J. E., Dickey, C. A. (2009) Chemical manipulation of Hsp70 reveals its role in tau processing. *Cell Transplantation*, Vol. 18, pp. 219 Published Abstract American Society for Neural Therapy & Repair
25. **Lee, D. C.**, Lebson, L., Rizer, J., Ruiz, C., Rojiani, R., Gordon, M., Morgan, D. (2009) Aging exaggerates classical activation responses but mitigates alternative activation following polarization of microglia. *Cell Transplantation*, Vol. 18, pp. 222. Published Abstract American Society for Neural Therapy & Repair
26. Williams, D., **Lee, D.C.**, Gordon, M. N., Morgan, D., (2010) Exaggerated neuroinflammation in NOS2 knockout mice. *Cell Transplantation*, Vol. 19, pp. 367. Published Abstract American Society for Neural Therapy & Repair
27. Selenica, M. L., **Lee, D. C.**, Gorgon, M., Morgan, D. (2010) Infiltration of GFP/CD11b+ BM derived monocytes to the brain of non transgenic mice is induced by inflammatory responses. *Cell Transplantation*, Vol. 19, pp. 360. Published Abstract American Society for Neural Therapy & Repair
28. **Lee, D. C.**, Rizer, J., Selenica, M. L., Reid, P., Kraft, C., Johnson, A., Anderson, L., Gordon, M. N., Dickey, C. A., Morgan, D., (2010) LPS-Induced inflammation exacerbates phospho-tau pathology in rTg4510 mice. *Cell Transplantation*, Vol. 19, pp. 347. Published Abstract American Society for Neural Therapy & Repair
29. Selenica, M., Nash, K., Alvarez, J., **Lee, D. C.**, Morgan, D., Gordon, M., (2010) Brain infiltration of peripheral monocytes via AAV-9 driven chemokine over-expression. International Conference for Alzheimer's Disease Abs# P3-319
30. **Lee, D. C.**, Malthankar-Phatak, G., Reid, P., Alvarez, J., Gordon, M., Siman, R., Morgan, D., (2010) Differential Response for Amyloid Clearance in APP Tg2576 mice and APP/ PS1 Double Knockin Mice Following Intracranial LPS International Conference for Alzheimer's Disease Abs# P1-311
31. **Lee, D. C.**, Malthankar-Phatak, G., Reid, P., Alvarez, J., Gordon, M., Siman, R., Morgan, D., (2010) Intracranial LPS Differentially Impacts Amyloid Clearance in APP Tg2576 Mice and APP/PS1 Double Knockin Mice Society for Neuroscience Abs# 746.10
32. Schroeder, S. K., Williams, D. E., **Lee, D. C.**, Gordon, M. N., Morgan, D. (2011) The Role of iNOS on Induced Inflammation and Alzheimer's disease Pathology Society for Neuroscience Abs# 457.24
33. Brownlow, M. L., Morgan, D., Selenica, M-L., **Lee, D. C.**, Gordon, M., Nash, K., (2011) Immune Reaction to Haemagglutinin tags Expressed by Viral Vectors Society for Neuroscience Abs# 515.2
34. Selenica, M-L. B., Nash, K., Alvarez, J., Reid, P., **Lee, D. C.**, Morgan, D., Gordon, M. N., (2011) Brain Infiltration of Peripheral Monocytes/ Macrophages lineage Cells via AAV9 Chemokine Overexpression Society for Neuroscience Abs# 878.6
35. Hunt, J., Placides, D., Nash, K., Selenica, M.L., Gordon, M.N., Morgan, D., **Lee, D.C.** Tau Overexpression using a tetO Transgenic mouse and bi-cistronic tetO-regulated Adenoassociated Virus. Neuroscience Research Day (SIPIN) June 1 2012 (*Winning Poster)
36. Selenica MLB, Nash K, **Lee DC**, Alvarez J, Reid P, Cao C, Gordon MN, Morgan D (2011) Brain Infiltration of Peripheral Cells of the Monocyte/Macrophage Lineage in Response to Chemokine Overexpression. Cell Transplantation 20:582-583.
37. Brownlow M, Selenica ML, **Lee DC**, Gordon M, Morgan D (2011) Intracranial Injection of Tau-5 Antibody Reduces Histological Tau Deposits in Middle-Aged Tg4510 Mice. Cell Transplantation 20:549-549.
38. Morgan D, **Lee DC**, Brownlow M, Selenica MLB, Reid P, Alvarez J, Gordon MN (2011, AD/PD Conference, Spain). Opposing roles of microglial activation in amyloid depositing and tau depositing transgenic mice.

39. Selenica MLB, Alvarez J, **Lee DC**, Nash. K, Reid P, Chao C, Morgan D, Gordon MN (2011, 1st Annual Pharmacogenomics Conference, US). CCL2 induces inflammatory responses and infiltration of peripheral monocytes into mouse CNS
40. Selenica MLB, **Lee DC**, Manchec B, Pena G, Nash. K, Morgan D, Gordon MN. (2012, ASNTR, US). Infiltration of peripheral macrophages following polarization of microglia in mouse CNS.
41. Hunt JB., Yang GYC., Nash K., Gordon M., Morgan D., **Lee DC**. Characterization of tau overexpression using a tetracycline-regulated transgenic mouse model and a tet-regulatable adeno-associated virus. Abstract #331 USF Research Day 2012. (***Winning Poster**)
42. Attilus B, Yang C, Housley BS, **Lee DC**, Jinwal U, Gordon MN, Morgan D, Selenica MLB HDAC inhibitors effect on tau, alpha synuclein and TDP43-Implication in neurodegenerative diseases. (***Winning poster, Neuroscience Award I, 2013, Research Day, USF Health, Tampa**).
43. Hunt JB, Nash K, Placides D, Selenica MLB, Gordon M, Morgan D, **Lee DC**. 2012. Tau Overexpression Using a TetO Transgenic Mouse and Bicistronic TetO-Regulated Adeno-associated virus Abstract #48.01/E22 Society for Neuroscience.
44. Nash K, **Lee DC**, Morganti JM, Moran P, Reid P, Savalia M, Gemma C, Bickford PC, Gordon MN, Morgan D Fractalkine Overexpression suppresses tau pathology in a mouse model of Tauopathy. 2012 Abstract# 825.05 Society for Neuroscience
45. Hunt JB Jr., Nash K, Placides D, Moran P, Rodrigez-Ospina S, Savlia M, Yang CY, Selenica MLB, Gordon M, Morgan D, **Lee DC** Overexpression of Arginase-1 in the CNS Mitigates tau Pathology in rTg4510 tau Transgenic Mice. Abstract# 297 Feb 2014, Research Day, USF Health Tampa (***Winning Poster**)
46. Johnson N, Hunt JB Jr., Liu J, Housley B, Nash K, **Lee DC**, Selenica MLB TDP-43 Pathology in Neurodegenerative Disorders. Abstract# 300 Feb 2014, Research Day, USF Health Tampa (***Winning Poster**)
47. Hunt JB, Placides D, Ratnasamy K, Selenica ML, Nash K, Sandusky L, Abuqalbeen F, **Lee DC**. Arginine Metabolism and Higher-Order Polyamines Impact Tau Aggregation, Microtubule Assembly and Autophagy in Models of Tauopathies. *Alzheimer's Association International Conference* July 2015 Abstract #5448.
48. Sanneh A, Johnson N, Housley SB, Manchec B, Lui J, Nash K, **Lee DC**, Gordon M, Morgan D. Selenica MLB. Characterization of Full-length and C-terminal Truncated Tau Pathological Progression with age in Wild-type mice. *Alzheimer's Association International Conference* July 2015 Abstract # 5291
49. Sandusky LA, Fraser WJD, Shair H, Barakat AM, Slouha NM, Ratnasamy K, Hunt JB, Nash K, **Lee DC**. Examining the Role of the Polyamine System in Animal Models of Tauopathy. *Society for Neuroscience Chicago Oct 2015* Abstract# 486.22.
50. Johnson N, Hunt JB, Housley B, Nash K, **Lee DC**, Selenica MLB, TDP-43 Pathology Drives Hippocampal CA2 Pyramidal Neuronal Degeneration and Neuroinflammation in CAMKIIa tTA mice. *Society for Neuroscience Chicago Oct 2015* Abstract# 423.19
51. Slouha N, Hunt, JB Jr., Sandusky LA, **Lee DC**. AAV9-tTa-GFP induces α -synuclein pathology in the tetO-SCNA *A53T responder mice and decreases tyrosine hydroxylase in the substantia nigra. Abstract# Feb 2015, Research Day, USF Health Tampa (***Winning Poster**) Best Undergraduate Student Poster Presentations Neuroscience I
52. Sandusky LA, Fraser W, Shair H, Barakat M, Hunt JB, Nash K, Selenica MLB, **Lee DC**. Polyamine Dysregulation and Tau: Independent and Synergistic Impacts on Affective and Cognitive Processing. USF Research Day 2016 USF Health, Tampa (**Winning Poster COP Postdoctoral Category**)
53. Barakat A, Hunt J, Ratnasamy K, Sandusky L, Abuqalbeen F, Selenica ML, **Lee DC**. The Effects of Arginase 1 Overexpression in the Hippocampus of Wild-type Mice. USF Research Day 2016 USF Health, Tampa (**Winning Poster Undergraduate Neuroscience Category 1**) & Undergraduate Symposium 2016 (**Honorable Mentioned**) & USF System STEM Summit in Downtown Tampa.
54. Sandusky, L. A., Watler, M. D., Roehrs, D. I., Shair, H., Barakat, A. M., Placides, D. S., Fraser, W. J. D., Hunt, J. B., Fontaine, S. N., Dickey, C. A., Selenica, M.-L., Nash, K. R., Gordon, M. N., Morgan, D. G., **Lee, D. C.** (2016, November) *A tau-dependent polyamine stress response elicits cognitive impairment and exacerbates neuropathology*. Oral Presentation at Society for Neuroscience Meeting, San Diego, CA, USA

55. Hunt, J. B., Sandusky, L. A., Fraser, W. F., Selenica, M.-L. B., Baker, J., Dickey, C. A., Nash, K. R., **Lee, D.C.** (2016, November) Arginase overexpression thwarts synuclein pathology in animal models of lewy body dementia. Poster Presentation at Society for Neuroscience Meeting, San Diego, CA, USA
56. Sandusky, L. A., Kovalenko, A., Hunt, J. B., Placides, D. S., Fontaine, S. N., Dickey, C.A., Fahnstock, M., Michalski, C., Selenica, M.-L. B., Nash, K. R., Gordon, M. N., Morgan, D. G., **Lee, D. C.** (2017, March) *Understanding the Polyamine Stress Response (PSR) In Alzheimer's Disease and Animal Models of Tauopathy*. Poster Presentation at the conference for Alzheimer's Disease and Parkinson's Disease (ADPD), Vienna, Austria.
57. Sandusky, L. A., Kovalenko, A., Placides, D. S., Fraser, W. J. D., Hunt, J. B., Fontaine, S. N., Dickey, C.A., Fahnstock, M., Michalski, C., Selenica, M.-L. B., Nash, K. R., Gordon, M. N., Morgan, D. G., **Lee, D. C.** (2017, April) *A tau-dependent polyamine stress response elicits cognitive impairment and exacerbates neuropathology*. Poster Presentation at the conference for The American Society for Neural Therapy and Repair (ASNTR), Clearwater, FL, USA.
58. Sandusky-Beltran, L. A., Kovalenko, A., Hunt, J. B., Placides, D. S., Fontaine, S. N., Dickey, C.A., Fahnstock, M., Selenica, M.-L. B., Nash, K. R., Gordon, M. N., Morgan, D. G., **Lee, D. C.** (2017, November) *Tau-dependent polyamine dysregulation promotes feed-forward cycle of disease progression*. Society for Neuroscience Meeting, Washington D. C., USA
59. **Ma C.**, Kovalenko A., Sandusky-Beltran L.A., Calahatian J., Liang H.M., Kallapurackal M., Hunt J.B., Nash K., Fahnstock M., Morgan D., Bickford P., **Lee D.C.** Uncovering Hyperactive Arginine Sensing Pathways in Tauopathies. Abstract# P1467, Dec 2017, American Society for Cell Biology 2017 Meeting, Philadelphia, Pennsylvania, USA (***Winning Poster**)
60. **Ma C.**, Calahatian J., Kallapurackal M., Fraser W., Hunt J.B., Sandusky-Beltran L.A., Kovalenko A., Brauner-Osborne H., Pedersen D.S., Nash K., Morgan D., Bickford P., **Lee D.C.** GPRC6A Linked mTORC1 Activation Impacts Tauopathies. Abstract# 677, Nov 2017, Society for Neuroscience 2017 Meeting, Washington, D.C., USA
61. **Ma C.**, Fraser W., Hunt J.B., Sandusky-Beltran L.A., Kovalenko A., Brauner-Osborne H., Pedersen D.S., Nash K., Morgan D., **Lee D.C.** GPRC6A Signaling Impacts mTORC1 Activation in Tauopathies. Abstract# 33, Sep 2017, Florida Translational Cell Biology 2017 Symposium, Gainesville, Florida, USA
62. **Ma C.**, Kovalenko A., Sandusky-Beltran L.A., Calahatian J., Liang H.M., Kallapurackal M., Hunt J.B., Nash K., Fahnstock M., Morgan D., Bickford P., **Lee D.C.** Arginine sensing induced mTORC1 activation affects tauopathies. Abstract#5 April 2018, American Society for Neural Therapy and Repair & International Neural Transplantation and Repair 2018 Conjunction Conference, Clearwater Beach, Florida, USA (***Winning Poster**)
63. **Ma C.**, Kovalenko A., Sandusky-Beltran L.A., Calahatian J., Liang H.M., Kallapurackal M., Hunt J.B., Nash K., Fahnstock M., Morgan D., Bickford P., **Lee D.C.** Tauopathies Reveal Uncoupling of Arginine Sensing Pathways and mTORC1 Activation. Sep 29th, 2018, Southeastern Neurodegenerative Disease Conference (SENDCon2018), Orlando, Florida, USA (***Invited "Hot Topics" Talk**)
64. **Ma C.**, Kovalenko A., Calahatian J., Liang H., Kallapurackal M., Hunt J., Sandusky-Beltran LA, Nash K, Fahnstock M, Bickford P, **Lee D.C** Tauopathies elicit uncoupling of mTORC1 signaling through arginine sensing pathways. GPCR Pharmacology: The Next Generation, Copenhagen Denmark 10/31/2018-11/2/2018.
65. **Ma C.**, Kovalenko A., Sandusky-Beltran L.A., Calahatian J., Liang H.M., Kallapurackal M., Hunt J.B., Nash K., Fahnstock M., Morgan D., Bickford P., **Lee D.C.** Tauopathies Reveal Uncoupling of Arginine Sensing Pathways and mTORC1 Activation. Dec. 1st, 2018, 2018 Cold Spring Harbor meeting: Neurodegenerative Diseases: Biology & Therapeutics. Cold Spring Harbor, NY, USA. (*Poster Presentation*)
66. **Ma C.**, Hunt J.B., Liang H.M., Bickford P., **Lee D.** Transcriptomic Analysis Revealed *Gprc6a* Haploinsufficiency Reduced Metabolic Pathways and Ameliorated Neurodegeneration in a Mouse Model of Alzheimer's Disease. Abstract #48857, Nov 9-10th, 2020, Alzheimer's Association International Conference-Neuroscience Next (AAIC-NN), virtual event hosted by Alzheimer's Association, IL, US. (*Virtual Poster Presentation: 3-minute video*)
67. **Ma C.**, Hunt J.B., Kovalenko A, Liang H.M., Gordon M.N., Morgan D., Bickford P., **Lee D.** Haploinsufficiency of Arginase 1 in Lysozyme M Cells Activates Amyloid- β Plaque Associated Glial

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Genes in a Mouse Model of Alzheimer's Disease. Abstract #17, Nov 9th, 2020, 10th Annual Markesbery Scientific Symposium on Aging and Dementia, virtual event hosted by Sanders-Brown Center on Aging (SBCoA), University of Kentucky, KY, US. (*Virtual Poster Presentation*)

68. **Ma C.**, Hunt J.B., Kovalenko A, Liang H.M., Gordon M.N., Morgan D., Bickford P., **Lee D.** Arginase 1 Deficiency in Brain Myeloid Cells Activates Amyloid- β Plaque Associated Glial Genes in a Mouse Model of Alzheimer's Disease. Neuroimmunology Topic Abstract #3, Oct 23, 2020, 5th Annual Neuroscience Clinical Translational Research Symposium, virtual event hosted by the Kentucky Neuroscience Institute, University of Kentucky, KY, US. (*Virtual Poster Presentation: 4-minute video*)

PROFESSIONAL SEMINARS (Invited Speaker, Seminars and Talks)

- 2008 Program Project Retreat and External Advisory Committee Meeting- Aminergic Function in Brain Aging and Alzheimer's disease (5/03/08), Clearwater FL "*Age-Related Gene Expression Following Classical or Alternative Activation in Mouse CNS: Project 3*"
- 2009 Program Project Retreat and External Advisory Committee Meeting- Aminergic Function in Brain Aging and Alzheimer's disease (5/03/09), Clearwater FL "*Age-Related Gene Expression Following Classical or Alternative Activation in Mouse CNS: Project 3 Update*"
- 2009 USF Neuroscience Program & Byrd Alzheimer Center Research Symposium (5/05/09), University of South Florida "*Microglia and Neurodegeneration: Friend or Foe?*"
- 2010 Program Project Retreat and External Advisory Committee Meeting- Aminergic Function in Brain Aging and Alzheimer's disease (3/10/10), Clearwater FL "*Aging exaggerates classical activation responses but mitigates alternative activation following polarization of microglia*"
- 2013 Society for Brain Mapping & Therapeutics Conference Baltimore Convention Center MD, May 12-14, 2013. 10th annual. "*Manipulations of Microglia During Aging and The Impact on Alzheimer's disease Pathology*"
- 2013 Work in progress GMS 7939 Graduate Seminar USF College of Medicine October 10, 2013 "*Manipulations of Microglia During Aging and the Impact on Alzheimer's Disease-like Pathology*"
- 2014 Florida A&M University College of Pharmacy & Pharmaceutical Sciences RCMI Program 2014 Seminar Series June 12, 2014 "*Neuroinflammation, Arginine Metabolism, and Polyamines: Disorder, The Commander and Regulators of Neuropathology*"
- 2014 Global Health Seminar Series University of South Florida Department of Global Health College of Public Health; September 9, 2014 "*Inflammation and the Impact on Models of Tauopathies*"
- 2014 College of Arts and Sciences; Department of Chemistry; Drug Discovery Colloquium; October 21, 2014 "*Harnessing Arginase 1 and Polyamines to Mitigate Tauopathies*"
- 2015 Society for Brain Mapping & Therapeutics 12th annual March 6-8th 2015, Los Angeles, CA "*Neuroinflammation and Arginine Metabolism: The Impact on Tau Neuropathology Abstract*" # 0120.
- 2015 4th Venusberg Meeting on Neuroinflammation, Bonn Germany May 7th-9th 2015 "*Inflammation and Tau Pathology*"
- 2017 The CurePSP International Research Symposium, San Francisco, CA October 26-27, 2017; "*Impact of Arginase1 overexpression and SAT1 deficiency during tauopathies*"
- 2017 PSP/ CBD research update and practical Conference, San Francisco, CA October 28, 2017; "*Understanding the role of polyamines in tauopathies*" <https://www.brainsupportnetwork.org/2017-1028-ppsp-and-cbd-conference/>
- 2018 "*Polyamines and Alzheimer's disease: Old molecules with new tricks*", Brain Day Seminar & Expo on Better Brain Health; Friday March 23, 2018; Suncoast Technical College, FL
- 2018 "*Uncoupling of mTOR signaling in Tauopathies: Retuning Arginine Sensors to Clear tau*", USF Health Neuroscience Institute Faculty Seminar Series October 4, 2018.
- 2018 "*Polyamine Stress Response and Nutrient Sensing in Tauopathies*," University of Kentucky, Lexington Sanders Brown Center on Aging, August 20, 2018

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- 2018 “Uncovering the Polyamine Stress Response in Tauopathies”, Michigan State University, Grand Rapids, Department of Translational Science & Molecular Medicine November 19, 2018
- 2019 “Understanding the Polyamine Stress Response in Tauopathies” Gordon Research Conference: Polyamines. Polyamines in Cancer Biology, Inflammation, Microbiome, Plants and Pathogens June 23-28, 2019 Waterville Valley, NH
- 2019 “Emerging Role of the Polyamine Stress Response in Alzheimer’s Disease” 9th Annual Markesbury Symposium on Aging & Dementia, November 6, 2019, University of Kentucky, KY
- 2020 “Leveraging amino acid sensors as therapeutic targets for tauopathies and related dementias.” Alzheimer’s Association International Conference (AAIC) Virtual Event July 27-31, 2020.
- 2021 “Nutrient Sensing dysfunction in Neurodegeneration: Re-TUNING Arginine Sensors in Proteinopathies” Florida A&M University, College of Pharmaceutical Sciences, Seminar 1/21/2021
- 2021 “Emerging Role of Tau Citrullination in Alzheimer’s and Tauopathies: Taking the CHARGE out of ARG” Neurodysfunction & Neurodegenerative Seminar Series (Virtual), 3/9/2021

PATENTS & Disclosures

1. USF REF No.: 14A008-Withaferin A Decreases Levels of Parkinson’s Disease Associated Protein Leucine Rich Repeat Kinase 2(LRRK2): April 10, 2014
2. **Patent No: US10,435,682 B2** Arginine Deiminase Gene Therapy for Disordered Proteins: Patent date: October 8, 2019
3. USF Ref. No.: 16B142 - Exploiting Allosteric Antagonists to GPRC6a to Mitigate Proteinopathies November 1, 2016 *Patent pending*

EMPLOYED LABORATORY TECHNIQUES

Molecular Biology: Plasmid construction, Cloning, Adeno-associated virus (AAV) preparations expression/ infection using *in vivo* and *in vitro* assays.

Biochemistry: Immunohistochemistry/ cytochemistry, Western Blotting, Immunoprecipitation, Enzymatic Activities, qRT-PCR, DNA/ RNA isolation, ELISA, Histology Techniques, Gel Electrophoresis, Routine Drug Microscopic Urinalysis

Cell Biology: Cell Culture Techniques, Transfections, Electroporation, siRNA applications, Small animal bone marrow harvesting/ isolation, Magnetic cell separation, Flow Cytometry

Animal Breeding & Colony Maintenance: Transgenic APP Tg2576 mice, Arginase null mice (C57BL/6-Arg1 tm1Pmu/J), CreLox mice (B6.129P2-Lyz2tm1(cre)lfo/J) Tg (Prnp-MAPT*P301S) tau transgenic mice, Spermidine, Spermine, N-acetyl transferase (SSAT) Conventional Knockout mice,(SNCA [C57BL/J6-Tg(tetO-SNCA)1Cai/J]; mutant synuclein transgenic mouse (SCNA*A53T); [C57BL/6JTg(tetO-SNCA*A53T)E2Cai/J]; 129S-Tg(Camk2a-tTA)1Mmay/DboJ]; FVB Tg(tetO-MAPT P301L); B6;CBA-Tg(Camk2a tTA (rTg4510), GPrC6a KO mice, GPRC6a CreLox KO mice, CASTOR KO mice, CASTOR CreLox KO mice.

Animal Experience (*in vivo*): Stereotaxic Surgery, Small Animal Pharmacology, Osmotic Mini Pump Surgeries and Intra cranial cannulation, Animal Behavior, Surgical Procedure dissections, Transcardial Perfusions, Catheterizations, Small Animal Cardiac Injections, Cardiac punctures, Intra-osseus (bone marrow) injections, Neuroanatomical dissections, Epilepsy Animal Models, Transient Forebrain Ischemia, Parkinson’s disease models.

Instrumentation: Quantitative image analysis, Operate Hematology Cytospin, Flouro-S Multi-imager, HPLC-Gel/ Reverse Phase, Autoclave/ Centrifuge Machines, Tissue Preparation/ Slicing/ Parafilm Embedding, Plate Specimen, Microtomes, Certain Flow Cytometry Instruments

TEACHING

GRADUATE PHARM.D COURSES DIRECTED USF

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- 2010-2011 **PHA 6574 Introduction to Principle of Drug Actions PHA 6777 Biochemical and Molecular Principles of Drug Actions** development stages
- 2011-2019 **PHA 6574 Introduction to Principle of Drug Actions** (2 credit hours; 60% Effort of Class), USF Pharm D (PY1 class), Receptor Theory/ Intracellular Signaling=7, Routes of Administration/ Absorption=7, Pharmacokinetics=7, Adrenergic Pharmacology=7, Local Anesthetics=7, Aspects in Geriatric Pharmacology=7 (total lectures in course years combined =42)
- 2012-2019 **PHA 6777 Biochemical and Molecular Principles of Drug Actions** (5 credit hours; 50% Effort of Class) USF Pharm D (PY1 class), Central Nervous System Pharmacology=7, GABAergic Pharmacology=7, Glutamate Pharmacology=7, Anti-depressants=7, Anti-epileptics=7, General Anesthetics=7, Pituitary Hormone Drugs=7, Thyroid Hormone Drugs=7, Analgesics=7, Alzheimer's/ Parkinson's disease=1, Neuroleptics=1 (total lectures in course years combined=65)

VR AR learning <https://hscweb3.hsc.usf.edu/blog/2018/10/10/pharmacy-students-use-ar-vr-to-study-impact-of-prescription-drugs-on-our-main-organs/>

LECTURES TAUGHT USF

- 2010 **GMS 7930-003 CRN11170** Alzheimer's Journal Club Seminar USF (Graduate students)
- 2011-2012 **PHA6870 Pharmaceutical Skills I** (2 credit hours) Geriatric case studies USF Pharm D (PY1 class)
- 2013 **PHA6531 Basic Principles of Toxicology** (2 credit hours) CNS Toxicity, Ocular Toxicity USF Pharm D (PY3 class)
- 2013-2014 **PHA6740 Grant Writing & Clinical Research** Mock Grant Review With Students, USF Pharm D (PY2 class) (total lectures in course years combined=3)
- 2014-2019 **PHA6787C Pharmacotherapeutics** (5 Credit hours) ICU Delirium=5, Neuromuscular Blocking Agents=5, USF Pharm D (PY3 class) (total lectures in course years combined=8)

UNDERGRADUATE COURSES TAUGHT USF

- 2014 **IDH 4910 Undergraduate Research HC HON** USF Interdisciplinary Research (1-3 credits) Undergraduate Students: Eslam Mohamed
- 2014 **ECH 4931 Special Topics in Chemical Engineering II** (Independent Study) USF College of Engineering (1-4 credits) Undergraduate Students: Selwin Varghese
- 2015 **IDH 4910 Undergraduate Research HC HON** USF Interdisciplinary Research (1-3 credits) Undergraduate Students: Rana Daas Summer 2015; Abdulah Barakat Summer 2015

GRADUATE PHD DISSERTATION & THESIS COMMITTEES

- 2011 **PHD Committee** Irina Filonova (Role: *Committee member*) PI: Ed Weeber USF Granted 2014
- 2014 **PHD Committee** Andrew Stothert (Role: *Committee member*) Major PI: Chad Dickey USF Granted 2016
- 2014 **PHD Committee** Mackenzie Martin (Role: *Committee member*) Major PI: Chad Dickey USF Granted 2016
- 2014 **PHD Committee** Antoine Flowers (Role: *Committee member*) Major PI: Paula Bickford USF Granted 2017
- 2015 **PHD Committee** Dylan Finneran (Role: *Committee member*) Major PI: Dave Morgan Co-Major PI: Kevin Nash USF Granted 2018
- 2015 **PHD Committee** Jeremy Baker (Role: *Committee member*) Major CO-PI: Laura Blair/ Bob Deschenes USF Granted 2018
- 2016 **PHD Committee Chao Ma** (Role: *Co-Major PI*) Co-Major PI: Paula Bickford USF Pending (Current status: PhD Candidate)
- 2017 **PHD Committee** Lindsey Shelton (Role: *Committee member*) Major PI: Major CO-PI: Laura Blair/ Bob Deschenes USF Granted 2018
- 2017 **PHD Committee** Ahmad Jalloh (Role: *Committee member*) Major PI: Paula Bickford USF

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2017 **PHD Committee** Yan Yan (Role: *Committee member*) Major PI: David Kang USF Pending
2018 **PHD Committee** Cory Diemler (Role: *Committee member*) Major PI: Edwin Weeber USF
2020 **PHD Committee** Edric Winford (Role: *Committee member*) major PI: Florin Despa UK
2020 **PHD Committee** Alex Early (Role: *Committee member*) major PI: Donna Wilcock UK

UNDERGRADUATE HONORS THESIS COMMITTEES

2008 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Committee member*) Justin Rizer USF Granted 2008
2011 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Kayleigh McCarty, USF Granted 2012
2012 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Yashobha Ranaweera, USF Granted 2012
2013 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Peter Moran USF Granted 2013
2013 University of Basel Department of Pharmaceutical Science, 6 month Study Abroad program (*Thesis Advisor*) Master Deborah Seiler (Granted July 17th 2013)
2013 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Committee member*) Miriam Chowdhari USF Granted 2013
2014 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Rodrigo Urcia USF Granted 2014
2014 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Younghoon Gim (Ark) USF Granted 2015
2014 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Committee member*) Kevin Ratnasamy USF Granted 2014
2014 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Committee member*) Awa Sanneh USF Granted 2014
2015 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Abdulah Barakat USF Granted 2015
2015 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Andrii Kovalenko USF Granted 2015
2015 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Committee Member*) Jeff Horton Granted 2016
2015 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Committee Member*) Nick Johnson USF Granted 2015
2016 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Rana Daas- USF Granted 2016
2016 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Shannon Varghese- USF Granted 2016
2016 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Razanne Oueini-- USF Granted 2017
2018 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) David Swilling- USF Granted 2019
2018 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Cecilie Pedersen- USF Granted 2019
2018 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Gameli Anthonio- USF Granted 2019
2018 **IDH5956.001F15-Thesis I; IDH5975.001S16 - Thesis II:** Honor's College Thesis (*Thesis Advisor*) Rafael Ruberia- USF Granted 2019

UNDERGRADUATE COURSES TAUGHT FLORIDA A&M UNIVERSITY

2000-2005 Anatomy & Physiology Lectured & Assisted with Laboratory Biology department (Undergraduate students)

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2003-2005	Pharmacology (Taught in Pharmacology Lab I & II) College of Pharmacy & Pharmaceutical Sciences (Pharm D Students)
2002-2005	Analytical Methods of Neuroscience College of Pharmacy & Pharmaceutical Sciences (Graduate students)
2003-2005	Pharmacological Techniques College of Pharmacy & Pharmaceutical Sciences (Graduate students)
2004-2005	Human Structure Function College of Pharmacy & Pharmaceutical Sciences (Pharm D students)

COLLEGE OF PHARMACY STUDENT ADVISEES

Purpose: schedule meetings, academic, personal support, and council students through out the four-year Pharm D didactic curriculum

Graduating Pharm D Class

2015	James Chili, Nalisha Minors, Richa Seth, Minal Shah
2016	Ivonne DelValle, Claudia Prieto, Dorissa Cortes, Benny Yau
2017	Ryan Barnhart, Zachary Lenhoff, Andrew Ort
2018	Richard Trevasani

College of Pharmacy Student Advisor/ Success Coach

	List of Students to advisee each year
2016-2017	Ryan Barnhart, Zachary Lenhoff, Andrew Ort, Joshua Gassaway, Dennis Trautmen, Molly Swango, Ruben Santana, Stefan Weekes, Alejandra Diaz, Thao Loi
2018	Kevin Jacques

RESEARCH PERSONNEL TRAINED

POSTDOCTORAL FELLOWS

2018- 2019	Lindsey Shelton (PhD Neurosciences)
2014-2018	Leslie A. Sandusky (PhD Behavioral Neurosciences)

TECHNICIANS (PAID)

2009-2011	Patrick Reid (USF) Currently Patent Lawyer
2010-Present	Jerry B. Hunt Jr. (USF B.S. Biology)
2011-2012	Clement Yang (Masters Degree)
2012	Devon Placides (Also see below)
2013-2014	Firas Abuqalbeen (Also see below)
2014-2015	Kevin Ratnasamy (USF B.S. Biomedical Science, also thesis committee)
2015-2016	William (Billy) Fraser (Also see below)
2016-2017	Fahd Rahmouni Medical school USF(Also see below)
2016-2018	Andrii Kovalenko (Also see below)
2017-2019	Malory Watler (Also see below)
2018-2019	John Calahatian
2019	Danielle Blazier
2019- Present	Huimin Liang

UNDERGRADUATE STUDENTS

2001	Fall, 2001 Swetal Gandhi (PharmD, Florida A&M University)
2003	Fall, 2003 Lateesha Wells (PharmD, Florida A&M University)
2004	Fall, 2004 Doneith Fraser (PharmD, Florida A&M University)
2004	Fall, 2004 Taaj Shelton (B.S. /M.S. Florida A&M University)
2005	Spring, 2005 Deidra Matthews (B.S. Florida A&M University)
2007	Fall, 2007 Justin Rizer (USF 7yr/ Medical School Program B.S.) MD Current

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2008 Summer 2008 Claudia Ruiz (Graduate B.S. Emory)
2011 Spring, 2011 Kayleigh McCarty (USF 7yr/ Medical School Program B.S.)
2011 Spring, 2011 Sammy Moussly (USF B.S. Biomedical Science)
2011 Spring, 2011 Miloni Salvalia (USF 7yr/ Medical School Program B.S.) MD Current
2011 Spring, 2011 Alexandra Da Silva (USF B.S. Biomedical Science)
2011 Summer 2011 Devon Placides (USF B.S. Biomedical Science) currently Pharm D PY4
2011 Summer 2011 Yashobha Ranaweera (USF B.S. Biomedical Science)
2011 Fall, 2011 Sameen Islam (USF Masters Biotechnology)
2012 Spring 2012 Daniel H. Lee (USF B.S. Biomedical Science)
2012 Spring 2012 Gi Sook Kim (USF B.S. Nursing)
2012 Spring 2012 Jennie Nwokoye (USF B.S. Biomedical Science)
2012 Spring 2012 Katherine Woo (USF B.S. Biomedical Science)
2012 Spring 2012 Santiago Rodriguez-Opsina (USF B.S. Biomedical Science)
2012 Spring 2012 Alyson Lozicki (USF B.S. Biomedical Science) currently Pharm D PY4
2013 Spring 2013 Nina Slouha (USF B.S. Engineering/ biology)
2013 Spring 2013 Christian Schuetz (USF B.S. Biomedical Science)
2013 Spring 2013 Rodrigo Urcia (USF B.S. Biomedical Science)
2013 Spring 2013 Etee Patel (USF B.S. Biomedical Science)
2013 Summer 2013 Devashi Tank (USF B.S. Biomedical Science)
2013 Summer 2013 Sabair Pradhan (USF Pharm D) Graduated
2013 Fall 2013 Selwin Varghese (USF B.S. Engineering)
2013 Fall 2013 Usman Ahmad (USF B.S. Biomedical Science)
2013 Fall 2013 Daniel T. Lee (USF B.S. Biomedical Science)
2013 Fall 2013 Ruth Thomas (USF B.S. Biomedical Science)
2013 Spring 2013 Firas Abuqalbeen (USF B.S. Biomedical Science) currently Pharm D PY3
2013 Fall 2013 Salil Desai (USF B.S. Biomedical Science)
2014 Spring 2014 Joshua Sajan (USF B.S. Biomedical Science)
2014 Spring 2014 Eslam Mohamed (USF B.S. Biomedical Science)
2014 Spring 2014 Silpa Beny (USF B.S. Biomedical Science)
2014 Spring 2014 Diana Jules (USF Pharmacy)
2014 Summer 2014 Mahmoud Ali-Mohamed (USF B.S. Biomedical Science)
2014 Summer 2014 Tammy Woo (USF B.S. Biomedical Science)
2014 Fall 2014 Abdulah Barakat (USF B.S. Biomedical Science)
2014 Fall 2014 Thuy Nguyen (USF B.S. Biomedical Science)
2014 Fall 2014 Hebah Shair (USF Graduate Psychology)
2014 Fall 2014 William (Billy) Fraser (USF Masters Program)
2015 Spring 2015 Rana Daas (USF Biomedical Science & Public Health)
2015 Spring 2015 Bernard Ndedi (USF B.S. Biomedical Science)
2015 Spring 2015 Shannon Varughese (USF B.S. Biomedical Science)
2015 Spring 2015 Saira Jafferjee (USF B.S. Biomedical Science)
2015 Spring 2015 Andrii Kovalenko (USF B.S. Biomedical Science)
2015 Spring 2015 Malory Watler (USF B.S. Health Science)
2015 Fall 2015 Daniellle Roehrs (USF Cellular Molecular Biology)
2015 Fall 2015 Zeerak Khan (USF Biology)
2015 Fall 2015 Souwelimatou Amadou Amani (USF Masters Neuroscience)
2015 Fall 2015 Patrick Prestarri (USF B.S. Biomedical Science)
2015 Fall 2015 Sophia Erb (USF Cellular Molecular Biology)
2015 Fall 2015 Ronal Alvarez (USF B.S. Public Health)
2016 Spring 2016 Daniel Spencer (USF B.S. Biomedical Science)
2016 Spring 2016 Nouhaila Beytour (USF B.S. Biomedical Science)
2016 Spring 2016 Kevin Moore (USF PharmD Program)
2016 Spring 2016 Spencer Price (USF B.S. Biomedical Science)
2016 Spring 2016 Leenil (Lee) Noel (USF B.S. Biomedical Science)

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2016 Summer 2016 Ammar Alsalahi (USF 1st year Med Student)
2016 Fall 2016 Danielle Blazier (USF B.S. Psychology)
2016 Fall 2016 Razanne Oueini (USF B.S. Chemistry)
2016 Fall 2016 Casey Perticone (USF PharmD Program)

HIGH SCHOOL INTERNS

2008 Bahar Shah, Rahil Rojani
2013 Nayo Joseph

UNIVERSITY SERVICE

COMMITTEES UNIVERSITY COLLEGE

2010-2017 USF Byrd Alzheimer's Investigators Committee
2011-present USF College of Pharmacy Student Interviews
2010- as needed ACPE USF College of Pharmacy Accreditation Reports Team
2010-2011 College wide Faculty Search Committee (USF College of Pharmacy)
2011-2012 Faculty council (Vice President) (USF College of Pharmacy)
2011-2013 Executive council (USF College of Pharmacy)
2011-2012 Research Committee (USF College of Pharmacy)
2011-2013 Curriculum Committee (USF College of Pharmacy)
2012-2013 Faculty Council (President) (USF College of Pharmacy)
2012-2014 White Coat Ceremony Committee (USF College of Pharmacy)
2013-2015 Departmental Tenure & Promotion Task Force (USF College of Pharmacy)
2013-2015 Faculty Search Committee (Departmental) (USF College of Pharmacy)
2013-2014 Faculty Council (Ex-officio) (USF College of Pharmacy)
2014-2015 NAPLEX Task Force (USF College of Pharmacy)
2014-2015 By-Laws Committee (USF College of Pharmacy)
2014-2015 USF College of Pharmacy Capstone Exam Development Ad hoc Committee
2015-2016 By-Laws Committee (Chair) (USF College of Pharmacy)
2015-2016 Graduation Committee (USF College of Pharmacy)
2016-2018 Research Committee (USF College of Pharmacy)
2017-2018 Curriculum Committee (USF College of Pharmacy)
2017-2019 USF Animal IACUC Committee (USF Tampa)
2017-2018 Tenure Promotion Committee (Departmental)
2020-present Search Committee (University of Kentucky Sanders-Brown Center on Aging)
2020-Present Marksbury Symposium Committee
2020-Present Department of Neuroscience Diversity Equity & Inclusion (DEI) Council

PROFESSIONAL SERVICE

MANUSCRIPT REVIEWS

2012 CNS & Neurological Disorders Drug Targets
2013 Journal of Neuroscience, PlosOne
2014 Neuroscience
2015 Journal of American Aging Association, Alzheimer's Research & Therapy, Journal of Alzheimer's disease, Brain Research
2016 Neurotoxicology, Neurobiology of Aging, PlosOne, Journal Neuroinflammation, Journal of Neuroscience, Alzheimer's Research & Therapy
2017 Alzheimer's Research & Therapy, Journal Neuroinflammation, Neurobiology of Aging
2018 Journal of Neuroimmunology, Neuroscience, Alzheimer's Research & Therapy

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2019 Autophagy
2020 Biomarkers in Medicine

GRANT REVIEWER AND STUDY PANELS

2010 MBRS Neurophysiology Panel (12/6/2010)
2011 Alzheimer's Associations (6/1/2011)
2012 Alzheimer's Associations (6/1/2012)
2014 CMND Study Section (6/2-3/2014 Meeting)
2015 NURD VA Neurobiology Panel (12/10-11/2015)
2016 NURD VA Neurobiology Panel (06/02/16-06/03/16)
2016 NIH/CSR ZRG1 MDCN-T (56), (11/ 2/16 Meeting)
2016 NURD VA Neurobiology Panel (12/9-10/2016)
2017 NIH/CSR ZRG1 MDCN-T (56), (3/2/17 Meeting)
2017 NURD VA Neurobiology Panel (12/8-9/2017)
2017 NIH/CSR ZRG1 BDCNR55 Panel (12/13/2017)
2018 NIH/CSR ZRG1 MDCN Panel (2/21/18-22/2018)
2018 NIH/CSR ZRG1 MDCN-E (57) R (2018/05)
2018 NIH/CSR ZRG1 MDCN-E (56) R (2018/05)
2018 **Standing Member NIH/ CMND July 1, 2018-June 30, 2024**
2018 NURD VA Neurobiology Panel (6/8/2018)
2018 ZRG1 MDCN-E (56) and ZRG1 MDCN-E (52) 6/28-29/2018
2018 NIH/ CMND Standing Study Section 10/22/2018-10/24/2018
2018 Veterans Affairs Study Section Neurobiology-D 12/7/2018
2019 **Standing Member Veterans Affairs Study Section Neuro-D 3/22/2019-6/1/2023**
2019 NIH/ CMND 1/31/2019
2019 NIH/ CMND 6/10/2019
2019 NURD VA Neurobiology Panel 6/7/2019
2019 NIH/ CMND 11/7/2019
2019 NURD VA Neurobiology Panel 12/6/2019
2020 Alzheimer's Association Grant Reviewer 01/22/2020
2020 NIH/ CMND 03/5/2020
2020 NURD VA Neurobiology Panel 6/5/2020
2020 NIH/ CMND 11/5/2020
2020 NURD VA Neurobiology Panel 12/5/2020
2021 NIH/ CMND 03/4/2021

OTHER SERVICE

2006 FASEB MARC Peer Mentor Experimental Biology San Diego, CA
2007 FASEB MARC Peer Mentor Experimental Biology Washington, DC
2008 FASEB MARC Peer Mentor Experimental Biology San Diego, CA
2009 FASEB MARC Peer Mentor Experimental Biology New Orleans, LA
2009 FASEB MARC Peer Mentor ABRCMS Phoenix, AZ
2010-2015 FASEB MARC Faculty Mentor (and thereafter as needed)
2010 USF Research Day Judge 2010
2010-2011 Postdoctoral Advisory Committee University South Florida
2011 USF Research Day Judge 2011
2012 USF Neuroscience Research Day (SIPIN) Judge 6/1/2012, USF Research Day Judge
2013 USF Research Day Judge 2013, USF College of Pharmacy Research Symposium Judge

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2012-2016 USF College of Pharmacy 2016 Class Advisor
2014 USF College of Pharmacy Research Symposium
2015 USF Research Day Judge 2015 College of Pharmacy Postdoctoral Category
2016 USF Research Day Oral Presentations Judge
2016 **McKnight Doctoral Research and Writing Conference:** Discussant for the Neuroscience Panel at the on February 26-27, 2016. Safety Harbor Resort, FL
2017 USF Research Day Judge 2017, February 24, 2017 University South Florida
2019 Research Poster Judge, University of Kentucky 9th Annual Markesbury Symposium on Aging & Dementia, November 6, 2019

PROFESSIONAL AFFILIATIONS

2007- 2012 American Society for Neural Therapy and Repair Membership
2007- Present Society for Neuroscience Membership
2010 - 2012 American Association for Colleges of Pharmacy
2011- Present International Society for Alzheimer's Treatment ISTAART
2013- 2015 Society for Brain Mapping & Therapeutics

REFERENCES

Furnished Upon Request