7/26/24

Laura J. Blair, PhD

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Research Biologist (GS-14)
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Professional Experience

2024-Present	Research Biologist (GS-14), Research Service (151R), James A. Haley Veterans Affairs Medical Center, Tampa, FL
2023-Present	Associate Professor, Department of Molecular Medicine, Morsani College of Medicine, University of South Florida, Tampa, FL
2019- 2024	Research Biologist (GS-13), Research Service (151R), James A. Haley Veterans Affairs Medical Center, Tampa, FL
2017-2023	Assistant Professor, Department of Molecular Medicine, Morsani College of Medicine, University of South Florida, Tampa, FL
2016-2017	Research Assistant Professor, Department of Molecular Medicine, Morsani College of Medicine, University of South Florida, Tampa, FL
2014-2016	Postdoctoral Scholar, Department of Molecular Medicine, Morsani College of Medicine, University of South Florida, Tampa, FL (PI: Chad Dickey)
2009-2014	Graduate Research Assistant, Department of Molecular Medicine, Morsani College of Medicine, University of South Florida, Tampa, FL (PI: Chad Dickey)
2008-2009	Research Technician, Department of Molecular Medicine, Morsani College of Medicine, University of South Florida, Tampa, FL (PI: Chad Dickey)
2006-2008	Undergraduate Research, Department of Chemistry, University of South Florida, Tampa, FL (PI: Bill Baker)

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Education

INSTITUTION AND LOCATION	DEGREE	YEAR	FIELD OF STUDY
University of South Florida, Tampa, FL	PhD	2014	Medical Sciences Emphasis: Molecular Medicine
University of South Florida, Tampa, FL	MS	2013	Medical Sciences Emphasis: Molecular Medicine
University of South Florida, Tampa, FL	BA	2009	Chemistry with Biochemistry Emphasis Minors: Public Health and Business

Research Support

Harrington Brain Institute
2023 Cathy and Paul Douglas Scholar in Alzheimer's Discovery (PI: LJ Blair)
An Aha(1) Moment for Tauopathies
The major goal of this study is to characterize Aha1/Hsp90 disruptors in vivo for the treatment of tauopathies.
01/01/2024 - 12/31/2024: $150,000 direct costs/year

USF Strategic Investment Pool (SIP) Award
Proposal #100374 (PI: LJ Blair)
07/01/2023 - 06/30/2024: $161,032 direct costs/year

National Institutes of Health/NINDS
2R01 NS073899 (PI: LJ Blair)
The Hsp90 cochaperone FKBP51 regulates tau structure and function
This proposal aims to validate FKBP51 as a target in tauopathy and explore the impact on neuropsychiatric symptoms.
03/01/2023 - 02/29/2028: $481,635 direct costs/year

Alzheimer's Association
AARG-22-974562 (PI: LJ Blair)
Developing risk and resiliency models of neuropsychiatric symptoms in AD
This proposal aims to generate novel mouse models for neuropsychiatric symptoms in tauopathy.
10/01/2022 - 09/30/2025: $45,455 direct costs/year

Florida Department of Health
Ed and Ethel Moore grant #21A24 (Florida Health) (PI: LJ Blair)
Exploiting molecular chaperones to understand the impact of tau aggregation on prion-like spreading in AD
The major goal of this project is to determine if chaperones affect tau seeding and release.
06/10/2021 – 04/30/2025: $61,905/direct costs/year

Veterans Health Administration
1I01 BX004626 (PI: LJ Blair)
Controlling FKBP51 for the treatment of PTSD
The major goal of this study is to develop novel strategies to deplete FKBP51 and understand more about the role of FKBP5 in circadian rhythmicity.
10/01/2019 – 09/30/2024 (NCE): $165,000 direct costs/year

Pending Support:

National Institutes of Health/NIA
1R01 AG086245 (PI: Mohapatra, Mohapatra, Bickford) Role: Co-I
Molecular Targets Modulating Neuro COVID Sequelae Linked to Tauopathy
04/01/2024 - 03/31/2029: $499,996 direct costs/year

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Impact Score 26

Veterans Health Administration
2I01 BX004626 (PI: LJ Blair)
Controlling FKBP51 for the treatment of PTSD
The major goal of this study is to develop novel strategies to deplete FKBP51 and validate FKBP51 as a target for PTSD.
10/01/2024 – 09/30/2028: $165,000 direct costs/year
Percentile 11.8, Impact Score 175

Completed Research Support:
Veterans Health Administration
1I01 BX003836-TTP GPAA-821012361 (PI: NA Patel) Role: Co-I
LncRNA-targeting therapeutic in ADRD
Test a GAS5 stabilizing molecule for the effects on cognition and tau pathology in tau transgenic mice.
03/01/2023 – 09/30/2023: $96,138 direct costs/year

USF Proposal Enhancement Grant (PEG) Award (PI: LJ Blair)
Development and Validation of FKBP51 ASOs for preventing tau pathology
The major goal of this project is to test novel FKBP51 targeting ASOs for their specificity and tau lowering effects.
05/01/2022 - 04/30/2023: $25,000/year direct costs

National Institutes of Health/NIA
1RF1 AG055088 (MPI: LJ Blair with P Bickford (contact) and V Uversky)
Controlling tau toxicity from inside and outside of neurons
The major goal of this study is to determine how small heat shock proteins regulate tau inside and outside of the tau to affect tau release, uptake, and neurotoxicity.
06/01/2017 - 08/31/2022 (NCE): $309,703 direct costs/year

Alzheimer's Association
AARG-18-566635 (PI: LJ Blair)
ER stress as a mediator of tau-induced neurotoxicity
The major goal of this study is to determine the contribution of neurotoxicity mediated through ER stress in tauopathy and to investigate how ER chaperones can regulate this process.
07/01/2018 - 06/30/2022 (NCE): $45,455 direct costs/year

National Institutes of Health/NINDS
5R01 NS073899 (PI: LJ Blair)
The Hsp90 cochaperone FKBP51 regulates tau structure and function
This proposal aims to evaluate the ability of the molecular chaperone machinery to control tau accumulation in the brain.
08/25/2021-12/31/2021 (NCE) $307,603 direct costs/year

National Institutes of Health/NIMH
1R01 MH103848 (PI: LJ Blair)
Modeling stress-related psychopathology through FKBP5 manipulation
02/01/2017 - 01/31/2021: $272,400 direct costs/year

USF Interdisciplinary Seed Grant (PIs: LJ Blair and J Del Valle)
Targeting tau with peptidomimetic inhibitors
01/15/2019 - 06/30/2020: $50,000/year direct costs

Peer-reviewed Publications

1. Esquivel AR, Hill SE, **Blair LJ***. “DnaJs are enriched in tau regulators.” **Int. J. Biol. Macromol**. 253 (2023) 127486. doi: 10.1016/j.ijbiomac.2023.127486. Epub 2023 Oct 16. PubMed PMID: 37852393; NIHMSID:NIHMS1942570. ***Corresponding author**
2. Hill SE, Beaulieu-Abdelahad D, Lemus A, Webster JM, Rodriguez Ospina S, Darling AL, Martin MD, Patel S, Bridenstine L, Swonger R, Paul S, Blackburn R, Calcul L, Dickey CA, Leahy JW, and **Blair LJ***. “Benzothiazole Substitution Analogs of Rhodacyanine Hsp70 Inhibitors Modulate Tau Accumulation” **ACS Chem. Biol**. 2023 May 19;18(5):1124-1135. doi: 10.1021/acschembio.2c00919. Epub 2023 May 5. PubMed PMID: 37144894; PubMed Central PMCID: PMC10443619. ***Corresponding author**
3. Gebru NT, Hill SE, **Blair LJ***. “Genetically Engineered Mouse Models of FK506-Binding Protein 5.” **J Cell Biochem.** 2023;1-17. doi:10.1002/jcb.30374. Review. PubMed PMID: 36780339; PubMed Central PMCID: PMC10423308. ***Corresponding author**
4. Jiang L, Chakraborty P, Zhang L, Wong M, Hill SE, Webber CJ, Libera J, **Blair LJ**, Wolozin B, Zweckstetter MA. “Chaperoning of specific tau structure by immunophilin FKBP12 regulates the neuronal resilience to extracellular stress.” **Sci Adv.** 2023 Feb 3;9(5):eadd9789. doi: 10.1126/sciadv.add9789. Epub 2023 Feb 1. PubMed PMID: 36724228. PubMed Central PMCID: PMC9891691.
5. Patel RS, Lui A, Hudson C, Moss L, Sparks RP, Hill SE, Shi Y, Cai J, **Blair LJ**, Bickford PC, Patel NA. “Small molecule targeting long noncoding RNA GAS5 administered intranasally improves neuronal insulin signaling and decreases neuroinflammation in an aged mouse model." **Scientific Reports**. 2023 Jan 6;13(1):317. doi: 10.1038/s41598-022-27126-6. PubMed PMID: 36609440. PubMed Central PMCID: PMC9822944.
6. Green R, Mayilsamy K, McGill AR, Martinez T, Chandran B, **Blair LJ**, Bickford PC, Mohapatra SS, Mohapatra S. “SARS-CoV-2 Infection Increases the Gene Expression Profile for Alzheimer's Disease Risk.” **Mol Ther Methods Clin Dev**. 2022 Dec 8;27:217-229. doi: 10.1016/j.omtm.2022.09.007. Epub 2022 Sep 24. PubMed PMID: 36187720; PubMed Central PMCID: PMC9508696.
7. Zhu Y, Gandy L, Zhang F, Liu J, Wang C, **Blair LJ**, Linhardt RJ, Wang L. “Heparan Sulfate Proteoglycans in Tauopathy”. **Biomolecules**. 2022 Nov 30;12(12). doi: 10.3390/biom12121792. Review. PubMed PMID: 36551220; PubMed Central PMCID: PMC9776397.
8. Hill SE, Esquivel AR, Rodriguez Ospina S, Rahal LM, Dickey CA, **Blair LJ***. “Chaperoning activity of the cyclophilin family prevents tau aggregation.” **Protein Science**. 2022 Nov;31(11):e4448. doi: 10.1002/pro.4448. PubMed PMID: 36305768; PubMed Central PMCID: PMC9597375. ***Corresponding author**
9. Criado-Marrero M, Blazier DM, Gould LA, Gebru NT, Rodriguez Ospina S, Armendariz DS, Darling AL, Beaulieu-Abdelahad D, **Blair LJ***. “Evidence against a contribution of the CCAAT-enhancer binding protein homologous protein (CHOP) in mediating neurotoxicity in rTg4510 mice” **Scientific Reports.** 2022 May 5;12(1):7372. doi: 10.1038/s41598-022-11025-x. PubMed PMID: 35513476; PubMed Central PMCID: PMC9072347. ***Corresponding author**
10. Rodriguez Ospina S, Blazier DM, Criado-Marrero M, Gould LA, Gebru NT, Beaulieu-Abdelahad D, Wang X, Remily-Wood E, Chaput D, Stevens S, Uversky VN, Bickford PC, Dickey CA, **Blair LJ***. Small Heat Shock Protein 22 Improves Cognition and Learning in the Tauopathic Brain. **Int. J. Mol. Sci.** 2022, 23, (2). doi: 10.3390/ijms23020851. PMID: 35055033; PubMed Central PMCID: PMC8775832. ***Corresponding author**
11. Lopez A, Dahiya V, Delhommel F, Freiburger L, Stehle R, Asami S, Rutz D, **Blair L**, Buchner J, Sattler M. Client binding shifts the populations of dynamic Hsp90 conformations through an allosteric network. **Sci Adv**. 2021 Dec 17;7(51):eabl7295. doi: 10.1126/sciadv.abl7295. Epub 2021 Dec 17. PubMed PMID: 34919431; PubMed Central PMCID: PMC8682993.
12. Darling AL, Dahrendorff J, Creodore SG, Dickey CA, **Blair LJ**, Uversky VN. “Small heat shock protein 22kDa can modulate the aggregation and liquid-liquid phase separation behavior of Tau.” **Protein Sci**. 2021 Jul;30(7):1350-1359. doi: 10.1002/pro.4060. Epub 2021 Mar 15. PubMed PMID: 33686711; PubMed Central PMCID: PMC8197419.
13. Criado-Marrero M, Gebru NT, Gould LA, Blazier DM, Vidal Agular, Y, Smith TM, Abdelmaboud SS, Shelton LB, Wang X, Dahrendorff J, Beaulieu-Abdelahad D, Dickey CA, **Blair LJ***. “FKBP52

overexpression accelerates hippocampal-dependent memory impairments in a tau transgenic mouse model." **NPJ Aging Mech Dis.** 2021 May 3;7(1):9. doi: 10.1038/s41514-021-00062-x. PubMed PMID: 33941782; PubMed Central PMCID: PMC8093247. ***Corresponding author**

14. Criado-Marrero, M, Gebru, NT, Blazier, DM, Gould LA, Baker JD, Beaulieu-Abdelahad D, **Blair LJ***. Hsp90 co-chaperones, FKBP52 and Aha1, promote tau pathogenesis in aged wild-type mice. **Acta Neuropathol Commun.** 2021 Apr 8;9(1):65. doi: 10.1186/s40478-021-01159-w. PubMed PMID: 33832539; PubMed Central PMCID: PMC8033733. ***Corresponding author**
15. Sandusky-Beltran LA, Kovalenko A, Placides D, Ratnasamy K, Ma C, Hunt JB, Liang H, Calahatian J, Michalski C, Fahnestock M, **Blair LJ**, Darling AL, Baker JD, Fontaine SN, Dickey CA, Gamsby JJ, Nash KR, Abner EL, Selenica MB, Lee DC. "Aberrant AZIN2 and polyamine metabolism precipitates tau neuropathology." **J Clin Invest**. 2021 Feb 15;131(4). doi: 10.1172/JCI126299. PubMed PMID: 33586680; PubMed Central PMCID: PMC7880423.
16. Favretto F, Flores D, Baker JD, Strohäker T, Andreas LB, **Blair LJ**, Becker S, and Zweckstetter MA. "Catalysis of proline isomerization and molecular chaperone activity in a tug-of-war." **Nat Comm**. 2020 Nov 27;11(1):6046. doi: 10.1038/s41467-020-19844-0. PubMed PMID: 33247146; PubMed Central PMCID: PMC7695863.
17. Criado-Marrero M, Smith TM, Gould LA, Kim S, Penny HJ, Sun Z, Gulick G, Dickey CA, **Blair LJ***. FKBP5 and early life stress affect the hippocampus by an age-dependent mechanism. **Brain Behav Immun Health.** 2020 Dec;9:100143. doi: 10.1016/j.bbih.2020.100143. eCollection 2020 Dec. PubMed PMID: 34589890; PubMed Central PMCID: PMC8474669. ***Corresponding author**
18. Webster JM, Darling AL, Sanders TA, Blazier DM, Vidal-Aguiar Y, Beaulieu-Abdelahad D, Plemmons DG, Hill SE, Uversky VN, Bickford PC, Dickey CA, **Blair LJ***. Hsp22 with an N-Terminal Domain Truncation Mediates a Reduction in Tau Protein Levels. **Int J Mol Sci.** 2020 Jul 30;21(15). doi: 10.3390/ijms21155442. PubMed PMID: 32751642; PubMed Central PMCID: PMC7432035. ***Corresponding author**
19. Favretto F, Baker JD, Strohäker T, Andreas L, **Blair LJ**; Becker S. Zweckstetter M. Molecular basis of the interaction of cyclophilin A with α-synuclein. **Angew Chem Int Ed Engl**. 2020 Mar 27;59(14):5643-5646. doi: 10.1002/anie.201914878. Epub 2020 Jan 29. PubMed PMID: 31830361; PubMed Central PMCID: PMC7085457.
20. Singh J, Tait B, Hutt DM, Guy NC, Sivils JC, Culbertson D, **Blair LJ**, Dickey CA, Kuo SY, Lu S, Chadli A, Finley D, Dyson HJ, Cox MB, Gestwicki JE, Balch WE. Management of Hsp90-Dependent Protein Folding by Small Molecules Targeting the Aha1 Co-Chaperone. **Cell Chem Biol.** 2020 Mar 19;27(3):292-305.e6. doi: 10.1016/j.chembiol.2020.01.008. Epub 2020 Feb 3. PubMed PMID: 32017918; PubMed Central PMCID: PMC7144688.
21. Criado-Marrero M., Sabbagh J.J., Jones M.R., Chaput D., Dickey C.A., **Blair L.J**.* Hippocampal Neurogenesis Is Enhanced in Adult Tau Deficient Mice. **Cells** 2020 Jan 14;9(1). doi: 10.3390/cells9010210. PubMed PMID: 31947657; PubMed Central PMCID: PMC7016791. ***Corresponding author**
22. Garcia L, Lora G, **Blair LJ**, Jinwal UK. Therapeutic Potential of the Hsp90/Cdc37 interaction in Neurodegenerative diseases. **Front. Neurosci**. 2019;13:1263. doi: 10.3389/fnins.2019.01263. eCollection 2019. Review. PubMed PMID: 31824256; PubMed Central PMCID: PMC6882380.
23. Webster JM, Darling AL, Uversky VN, **Blair LJ***. Small Heat Shock Proteins, Big Impact on Protein Aggregation in Neurodegenerative Disease. **Front Pharmacol**. 2019;10:1047. doi: 10.3389/fphar.2019.01047. eCollection 2019. Review. PubMed PMID: 31619995; PubMed Central PMCID: PMC6759932. ***Corresponding author**
24. Oroz J, **Blair LJ**, Zweckstetter M. Dynamic Aha1 Co-Chaperone Binding to Human Hsp90. **Protein Science**. 2019 Sep;28(9):1545-1551. doi: 10.1002/pro.3678. Epub 2019 Aug 6. PubMed PMID: 31299134; PubMed Central PMCID: PMC6699087.
25. Sandusky-Beltran LA, Kovalenko A, Ma C, Calahatian JT, 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-N^1-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.

26. Criado-Marrero M, Gebru NT, Gould LA, Smith T, Kim S, Blackburn RJ, Dickey CA, **Blair LJ***. Early life stress and high FKBP5 interact to increase anxiety-like symptoms through altered AKT signaling in the dorsal hippocampus. **Int. J. Mol. Sci.** 2019 Jun 4;20(11). doi: 10.3390/ijms20112738. PubMed PMID: 31167373; PubMed Central PMCID: PMC6600369. ***Corresponding author**
27. Darling A, Breydo L, Rivas EG, Gebru NT, Zheng D, Baker JD, **Blair LJ**, Dickey CA, Koren J, Uversky V. Repeated Repeat Problems: Combinatorial Effect of C9orf72-Derived Dipeptide Repeat Proteins. **Int. J. Biol. Macromol.** 2019 Apr 15;127:136-145. doi: 10.1016/j.ijbiomac.2019.01.035. Epub 2019 Jan 9. PubMed PMID: 30639592.
28. **Blair LJ***, Criado-Marrero M, Zheng D, Wang X, Kamath S, Nordhues BA, Weeber EJ, Dickey CA. The Disease-Associated Chaperone FKBP51 Impairs Cognitive Function by Accelerating AMPA Receptor Recycling. **eNeuro**. 2019 Mar 1;6(1): ENEURO.0242-18.2019. doi: 10.1523/ENEURO.0242-18.2019. eCollection 2019 Jan-Feb. PubMed PMID: 30963102; PubMed Central PMCID: PMC6450497. ***Corresponding author**
29. **Blair LJ,** Genest O, Mollapour M. The multiple facets of the Hsp90 machine. **Nat. Struct. Mol. Biol.** 2019 Feb;26(2):92-95. doi: 10.1038/s41594-018-0177-7. PubMed PMID: 30617298; PubMed Central PMCID: PMC6365192.
30. Baker JD, Ozsan I, Rodriguez Ospina S, Gulick D, **Blair LJ***. Hsp90 heterocomplexes regulate steroid hormone receptors: From stress response to psychiatric disease. **Int J Mol Sci**. 2018 Dec 25;20(1). doi: 10.3390/ijms20010079. Review. PubMed PMID: 30585227; PubMed Central PMCID: PMC6337637. ***Corresponding author**
31. Oroz J, Chang BJ, Wysoczanski P, Lee, CT, Pérez-Lara, Á, Chakraborty, P, Hofele, RV, Baker, JD, **Blair, LJ**, Biernat, J, Urlaub, H, Mandelkow, E, Dickey, CA, and Zweckstetter, M. Structure and pro-toxic mechanism of the human Hsp90/PPIase/Tau complex. **Nat Commun**. 2018 Oct 31;9(1):4532. doi: 10.1038/s41467-018-06880-0. PubMed PMID: 30382094; PubMed Central PMCID: PMC6208366.
32. Sabbagh, JJ, Cordova, RA, Zheng, D, Criado-Marrero, M, Lemus, A, Li, P, Baker, JD, Nordhues, BA, Darling, AL, Martinez-Licha, C, Rutz, DA, Patel, S, Buchner, J., Leahy, JW, Koren, J, Dickey, CA, and **Blair, LJ*.** (2018) Targeting the FKBP51/GR/Hsp90 complex to identify functionally relevant treatments for depression and PTSD, **ACS Chem. Biol.** 2018 Aug 17;13(8):2288-2299. doi: 10.1021/acschembio.8b00454. Epub 2018 Jun 19. PubMed PMID: 29893552; PubMed Central PMCID: PMC6126901. ***Corresponding author**
33. Huard DJE, Crowley VM, Du Y, Cordova RA, Sun Z, Tomlin MO, Dickey CA, Koren J 3rd, **Blair L**, Fu H, et al. Trifunctional High-Throughput Screen Identifies Promising Scaffold To Inhibit Grp94 and Treat Myocilin-Associated Glaucoma. **ACS Chem Biol**. 2018 Apr 20;13(4):933-941. doi: 10.1021/acschembio.7b01083. Epub 2018 Feb 20. PubMed PMID: 29402077; PubMed Central PMCID: PMC6195314.
34. Criado-Marrero M, Rein T, Binder EB, Porter JT, Koren III J, **Blair LJ***. Hsp90 and FKBP51: complex regulators of psychiatric diseases. **Philos Trans R Soc Lond B Biol Sci.** 2018 Jan 19;373(1738). doi: 10.1098/rstb.2016.0532. Review. PubMed PMID: 29203717; PubMed Central PMCID: PMC5717532. ***Corresponding author**
35. Shelton LB, Koren III J, **Blair LJ***. Imbalances in the Hsp90 chaperone machinery: Implications for tauopathies. **Front. Neurosci.** 2017;11:724. doi: 10.3389/fnins.2017.00724. eCollection 2017. Review. PubMed PMID: 29311797; PubMed Central PMCID: PMC5744016. ***Corresponding author**
36. Stothert AR, Suntharalingam A, Tang X, Crowley VM, Mishra SJ, Webster JM, Nordhues BA, Huard DJE, Passaglia C, Lieberman RL, Blagg BSJ, **Blair LJ***, Koren III J*, Dickey CA. Isoform-selective Hsp90 inhibition rescues model of hereditary open-angle glaucoma. **Sci Rep**. 2017 Dec 20;7(1):17951. doi: 10.1038/s41598-017-18344-4. PubMed PMID: 29263415; PubMed Central PMCID: PMC5738387. ***Corresponding author**
37. Shelton LB*, Baker JD*, Zheng D*, Sullivan LE, Solanki PK, Webster JM, Sun Z, Sabbagh JJ, Nordhues BA, Koren J 3rd, Ghosh S, Blagg BSJ, **Blair LJ***, Dickey CA. Hsp90 activator Aha1 drives production of pathological tau aggregates. **Proc Natl Acad Sci U S A.** 2017 Sep 5;114(36):9707-9712. doi:

10.1073/pnas.1707039114. Epub 2017 Aug 21. PubMed PMID: 28827321; PubMed Central PMCID: PMC5594679. ***Corresponding author**

38. Baker JD*, Shelton LB*, Zheng D*, Favretto F, Nordhues BA, Darling A, Sullivan LE, Sun Z, Solanki PK, Martin MD, Suntharalingam A, Sabbagh JJ, Becker S, Mandelkow E, Uversky VN, Zweckstetter M, Dickey CA, Koren J 3rd, **Blair LJ***. Human cyclophilin 40 unravels neurotoxic amyloids. **PLoS Biol**. 2017 Jun;15(6):e2001336. doi: 10.1371/journal.pbio.2001336. eCollection 2017 Jun. PubMed PMID: 28654636; PubMed Central PMCID: PMC5486962. ***Corresponding author**
39. 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 Oct 1;33(19):1751-1760. doi: 10.1089/neu.2015.4288. Epub 2016 Mar 16. PubMed PMID: 26739819; PubMed Central PMCID: PMC5065038
40. Zheng D, Sabbagh JJ, **Blair LJ**, Darling AL, Wen X, Dickey CA. MicroRNA-511 Binds to FKBP5 mRNA, Which Encodes a Chaperone Protein, and Regulates Neuronal Differentiation. **J Biol Chem**. 2016 Aug 19;291(34):17897-906. doi: 10.1074/jbc.M116.727941. Epub 2016 Jun 21. PubMed PMID: 27334923; PubMed Central PMCID: PMC5016178.
41. Fontaine SN, Zheng D, Sabbagh JJ, Martin MD, Chaput D, Darling A, Trotter JH, Stothert AR, Nordhues BA, Lussier A, Baker J, Shelton L, Kahn M, **Blair LJ**, Stevens SM Jr, Dickey CA. DnaJ/Hsc70 chaperone complexes control the extracellular release of neurodegenerative-associated proteins. **EMBO J**. 2016 Jul 15;35(14):1537-49. doi: 10.15252/embj.201593489. Epub 2016 Jun 3. PubMed PMID: 27261198; PubMed Central PMCID: PMC4946142
42. **Blair LJ**, Baker JD, Sabbagh JJ, Dickey CA. The emerging role of peptidyl-prolyl isomerase chaperones in tau oligomerization, amyloid processing, and Alzheimer's disease. **J Neurochem**. 2015 Apr;133(1):1-13. doi: 10.1111/jnc.13033. Epub 2015 Feb 24. Review. PubMed PMID: 25628064; PubMed Central PMCID: PMC4361273.
43. **Blair LJ**, Frauen HD, Zhang B, Nordhues BA, Bijan S, Lin YC, Zamudio F, Hernandez LD, Sabbagh JJ, Selenica ML, Dickey CA. Tau depletion prevents progressive blood-brain barrier damage in a mouse model of tauopathy. **Acta Neuropathol Commun.** 2015 Jan 31;3:8. doi: 10.1186/s40478-015-0186-2. PubMed PMID: 25775028; PubMed Central PMCID: PMC4353464.
44. **Blair LJ**, Sabbagh JJ, Dickey CA. Targeting Hsp90 and its co-chaperones to treat Alzheimer's disease. **Expert Opin Ther Targets**. 2014 Oct;18(10):1219-32. doi: 10.1517/14728222.2014.943185. Epub 2014 Jul 29. Review. PubMed PMID: 25069659; PubMed Central PMCID: PMC4625388.
45. Sabbagh JJ, O'Leary JC 3rd, **Blair LJ**, Klengel T, Nordhues BA, Fontaine SN, Binder EB, Dickey CA. Age-associated epigenetic upregulation of the FKBP5 gene selectively impairs stress resiliency. **PLoS One**. 2014;9(9):e107241. doi: 10.1371/journal.pone.0107241. eCollection 2014. PubMed PMID: 25191701; PubMed Central PMCID: PMC4156438.
46. 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.
47. O'Leary JC 3rd, Zhang B, Koren J 3rd, **Blair L**, Dickey CA. The role of FKBP5 in mood disorders: action of FKBP5 on steroid hormone receptors leads to questions about its evolutionary importance. **CNS Neurol Disord Drug Targets**. 2013 Dec;12(8):1157-62. Review. PubMed PMID: 24040820; PubMed Central PMCID: PMC4236834.
48. **Blair LJ**, Nordhues BA, Hill SE, Scaglione KM, O'Leary JC 3rd, Fontaine SN, Breydo L, Zhang B, Li P, Wang L, Cotman C, Paulson HL, Muschol M, Uversky VN, Klengel T, Binder EB, Kayed R, Golde TE, Berchtold N, Dickey CA. Accelerated neurodegeneration through chaperone-mediated oligomerization of tau. **J Clin Invest**. 2013 Oct;123(10):4158-69. doi: 10.1172/JCI69003. Epub 2013 Sep 3. PubMed PMID: 23999428; PubMed Central PMCID: PMC3784538.

49. **Blair LJ**, Zhang B, Dickey CA. Potential synergy between tau aggregation inhibitors and tau chaperone modulators. **Alzheimers Res Ther**. 2013;5(5):41. doi: 10.1186/alzrt207. eCollection 2013. Review. PubMed PMID: 24041111; PubMed Central PMCID: PMC3979086.
50. Abisambra J, Jinwal UK, Miyata Y, Rogers J, **Blair L**, Li X, Seguin SP, Wang L, Jin Y, Bacon J, Brady S, Cockman M, Guidi C, Zhang J, Koren J, Young ZT, Atkins CA, Zhang B, Lawson LY, Weeber EJ, Brodsky JL, Gestwicki JE, Dickey CA. Allosteric heat shock protein 70 inhibitors rapidly rescue synaptic plasticity deficits by reducing aberrant tau. **Biol Psychiatry**. 2013 Sep 1;74(5):367-74. doi: 10.1016/j.biopsych.2013.02.027. Epub 2013 Apr 19. PubMed PMID: 23607970; PubMed Central PMCID: PMC3740016.
51. Abisambra JF, Jinwal UK, **Blair LJ**, O'Leary JC 3rd, Li Q, Brady S, Wang L, Guidi CE, Zhang B, Nordhues BA, Cockman M, Suntharalingham A, Li P, Jin Y, Atkins CA, Dickey CA. Tau accumulation activates the unfolded protein response by impairing endoplasmic reticulum-associated degradation. **J Neurosci**. 2013 May 29;33(22):9498-507. doi: 10.1523/JNEUROSCI.5397-12.2013. PubMed PMID: 23719816; PubMed Central PMCID: PMC3733249.
52. Jinwal UK, Akoury E, Abisambra JF, O'Leary JC 3rd, Thompson AD, **Blair LJ**, Jin Y, Bacon J, Nordhues BA, Cockman M, Zhang J, Li P, Zhang B, Borysov S, Uversky VN, Biernat J, Mandelkow E, Gestwicki JE, Zweckstetter M, Dickey CA. Imbalance of Hsp70 family variants fosters tau accumulation. **FASEB** J. 2013 Apr;27(4):1450-9. doi: 10.1096/fj.12-220889. Epub 2012 Dec 27. PubMed PMID: 23271055; PubMed Central PMCID: PMC3606536.
53. Suntharalingam A, Abisambra JF, O'Leary JC 3rd, Koren J 3rd, Zhang B, Joe MK, **Blair LJ**, Hill SE, Jinwal UK, Cockman M, Duerfeldt AS, Tomarev S, Blagg BS, Lieberman RL, Dickey CA. Glucose-regulated protein 94 triage of mutant myocilin through endoplasmic reticulum-associated degradation subverts a more efficient autophagic clearance mechanism. **J Biol Chem**. 2012 Nov 23;287(48):40661-9. doi: 10.1074/jbc.M112.384800. Epub 2012 Oct 3. PubMed PMID: 23035116; PubMed Central PMCID: PMC3504779.
54. Koren J 3rd, Miyata Y, Kiray J, O'Leary JC 3rd, Nguyen L, Guo J, **Blair LJ**, Li X, Jinwal UK, Cheng JQ, Gestwicki JE, Dickey CA. Rhodacyanine derivative selectively targets cancer cells and overcomes tamoxifen resistance. **PLoS One**. 2012;7(4):e35566. doi: 10.1371/journal.pone.0035566. Epub 2012 Apr 26. PubMed PMID: 22563386; PubMed Central PMCID: PMC3338522.
55. Abisambra JF, Jinwal UK, Jones JR, **Blair LJ**, Koren J 3rd, Dickey CA. Exploiting the diversity of the heat-shock protein family for primary and secondary tauopathy therapeutics. **Curr Neuropharmacol**. 2011 Dec;9(4):623-31. doi: 10.2174/157015911798376226. PubMed PMID: 22654720; PubMed Central PMCID: PMC3263456.
56. O'Leary JC 3rd, Dharia S, **Blair LJ**, Brady S, Johnson AG, Peters M, Cheung-Flynn J, Cox MB, de Erausquin G, Weeber EJ, Jinwal UK, Dickey CA. A new anti-depressive strategy for the elderly: ablation of FKBP5/FKBP51**. PLoS One**. 2011;6(9):e24840. doi: 10.1371/journal.pone.0024840. Epub 2011 Sep 15. PubMed PMID: 21935478; PubMed Central PMCID: PMC3174203.
57. Jones JR, Lebar MD, Jinwal UK, Abisambra JF, Koren J 3rd, **Blair L**, O'Leary JC, Davey Z, Trotter J, Johnson AG, Weeber E, Eckman CB, Baker BJ, Dickey CA. The diarylheptanoid (+)-aR,11S-myricanol and two flavones from bayberry (Myrica cerifera) destabilize the microtubule-associated protein tau. **J Nat Prod**. 2011 2011 Jan 28;74(1):38-44. doi: 10.1021/np100572z. Epub 2010 Dec 8. PubMed PMID: 21141876; PubMed Central PMCID: PMC3070757.
58. Abisambra JF*, **Blair LJ***, Hill SE, Jones JR, Kraft C, Rogers J, Koren J 3rd, Jinwal UK, Lawson L, Johnson AG, Wilcock D, O'Leary JC, Jansen-West K, Muschol M, Golde TE, Weeber EJ, Banko J, Dickey CA. Phosphorylation dynamics regulate Hsp27-mediated rescue of neuronal plasticity deficits in tau transgenic mice. **J Neurosci**. 2010 Nov 17;30(46):15374-82. doi: 10.1523/JNEUROSCI.3155-10.2010. PubMed PMID: 21084594; PubMed Central PMCID: PMC3073547.
59. O'Leary JC 3rd, Li Q, Marinec P, **Blair LJ**, Congdon EE, Johnson AG, Jinwal UK, Koren J 3rd, Jones JR, Kraft C, Peters M, Abisambra JF, Duff KE, Weeber EJ, Gestwicki JE, Dickey CA. Phenothiazine-mediated rescue of cognition in tau transgenic mice requires neuroprotection and reduced soluble tau burden. **Mol Neurodegener**. 2010 Nov 1;5:45. doi: 10.1186/1750-1326-5-45. PubMed PMID: 21040568; PubMed Central PMCID: PMC2989315.

60. 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.
61. Jinwal UK, O'Leary JC 3rd, Borysov SI, Jones JR, Li Q, Koren J 3rd, Abisambra JF, Vestal GD, Lawson LY, Johnson AG, **Blair LJ**, Jin Y, Miyata Y, Gestwicki JE, Dickey CA. Hsc70 rapidly engages tau after microtubule destabilization. **J Biol Chem**. 2010 May 28;285(22):16798-805. doi: 10.1074/jbc.M110.113753. Epub 2010 Mar 22. PubMed PMID: 20308058; PubMed Central PMCID: PMC2878041.
62. Koren J 3rd, Jinwal UK, Jin Y, O'Leary J, Jones JR, Johnson AG, **Blair LJ**, Abisambra JF, Chang L, Miyata Y, Cheng AM, Guo J, Cheng JQ, Gestwicki JE, Dickey CA. Facilitating Akt clearance via manipulation of Hsp70 activity and levels. **J Biol Chem**. 2010 Jan 22;285(4):2498-505. doi: 10.1074/jbc.M109.057208. Epub 2009 Nov 4. PubMed PMID: 19889640; PubMed Central PMCID: PMC2807306.
63. Jinwal UK, Koren J 3rd, Borysov SI, Schmid AB, Abisambra JF, **Blair LJ**, Johnson AG, Jones JR, Shults CL, O'Leary JC 3rd, Jin Y, Buchner J, Cox MB, Dickey CA. The Hsp90 cochaperone, FKBP51, increases Tau stability and polymerizes microtubules. **J Neurosci**. 2010 Jan 13;30(2):591-9. doi: 10.1523/JNEUROSCI.4815-09.2010. PubMed PMID: 20071522; PubMed Central PMCID: PMC2830818.
64. 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. doi: 10.1111/j.1582-4934.2008.00557.x. Review. PubMed PMID: 19449461; PubMed Central PMCID: PMC2749087.
65. 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 2009 Jan;174(1):228-38. doi: 10.2353/ajpath.2009.080764. Epub 2008 Dec 12. PubMed PMID: 19074615; PubMed Central PMCID: PMC2631335.

Non-Peer Reviewed Contributions

1. Bourboulia D, **Blair LJ**, Clark MS, Edkins AL, Hightower LE, Mollapour M, Prahlad V, Repasky EA, Truebano M, Truman AW, Truttmann MC, van Oosten-Hawle P, Woodford MR. Editorial: A new chapter for Cell Stress and Chaperones. **Cell Stress Chaperones**. 2024. doi: https://doi.org/10.1016/j.cstres.2024.01.007.
2. Mayer MP, **Blair L**, Blatch GL, Borges TJ, Chadli A, Chiosis G, de Thonel A, Dinkova-Kostova A, Ecroyd H, Edkins AL, Eguchi T, Fleshner M, Foley KP, Fragkostefanakis S, Gestwicki J, Goloubinoff P, Heritz JA, Heske CM, Hibshman JD, Joutsen J, Li W, Lynes M, Mendillo ML, Mivechi N, Mokoena F, Okusha Y, Prahlad V, Repasky E, Sannino S, Scalia F, Shalgi R, Sistonen L, Sontag E, van Oosten-Hawle P, Vihervaara A, Wickramaratne A, Wang SXY, Zininga T. “Stress Biology: Complexity and Multifariousness in Health and Disease.” **Cell Stress Chaperones**. 2024. doi: https://doi.org/10.1016/j.cstres.2024.01.006.

Book Chapters

1. Sun Z, Blackburn RJ, **Blair LJ**, Koren J 3rd. “Hsp70-Family Proteins and Neurodegenerative Diseases”, In: Asea A., Kaur P. (eds) **HSP70 in Human Diseases and Disorders.** Heat Shock Proteins, vol 14. (2018) Springer, Cham. Doi: doi.org/10.1007/978-3-319-89551-2.
2. Baker JD, Webster JM, Shelton LB, Koren J 3rd, Uversky VN, **Blair LJ**, Dickey CA. “Neurodegenerative Diseases as Protein Folding Disorders.” **The Molecular and Cellular Basis of Neurodegenerative Diseases 1st Edition**. Elsevier. 243-267. 2018 Mar 1.

Other publications: Thesis Publication

“Age-associated increases in FKBP51 facilitate tau neurotoxicity.” (2014)

Patents

1. US-10,814,015-B2 “Transgenic mouse model for conditional FKBP51 expression and related methods.” Issued 10/27/2020
2. US-11,318,115-B2 “Hsp90 Activator Aha1 Drives Productions of Pathological Tau Aggregates.” Issued 05/03/2022
3. US-11,931,373-B2 “Hsp90 Activator Aha1 Drives Productions of Pathological Tau Aggregates.” Issued 03/19/2024

National or International Conference Invitations

1. “An Aha(1) Disruptor for Tauopathies”. **2024 Harrington Discovery Institute Scientific Symposium**. May 2024. Cleveland, OH. Invited Symposium Speaker.
2. “Targeting Molecular Chaperones to Modulate Tau Accumulation.” **Tau 2024 Global Conference**. March 2024. Washington, DC. Invited Poster.
3. “Taming Tau: How Molecular Chaperones Regulate Tau Aggregation”. **12th International Symposium on Heat Shock Proteins in Biology, Medicine and the Environment.** October 2023. Old Town Alexandria, VA. Invited Symposium Speaker.
4. “Chaperoning Tau.” **Southeastern Neurodegenerative Disease Conference**. October 2023. Atlanta, GA. Invited Plenary Speaker.
5. “Development of FKBP5 ASOs to mitigate tau pathology.” **Alzheimer’s Association International Conference**. July 2023. Amsterdam, The Netherlands. Invited Poster.
6. “Hsp40 molecular chaperones are potent regulators of tau seeding and accumulation.” **Alzheimer’s Association International Conference**. July 2023. Amsterdam, The Netherlands. Invited Poster.
7. “What is Alzheimer’s disease and how can we fix it?” **Life Science Women’s Conference (LSWC)**. September 2022. Tampa, FL. Invited Symposium Speaker.
8. “Chaperoning Tau Pathogenesis.” **American Society for Neural Therapy & Repair**, August 2021. Clearwater, FL. Invited Symposium Speaker.
9. “Contribution of ER stress to tau-mediated toxicity.” **Alzheimer’s Association International Conference**. July 2021. Invited Digital Poster.
10. “Chaperoning tau pathogenesis.” **Cold Spring Harbor - Protein Homeostasis in Health and Disease**. November 2020. Invited Digital Poster.
11. “Chaperone imbalance drives tau pathogenesis.” **Alzheimer’s Association International Conference**. July 2020. Digital Poster.
12. “PPIases have divergent effects on tau aggregation and toxicity.” **Society for Neuroscience**. October 2019. Chicago, IL. Invited Nanosymposia Speaker.
13. “Peptidyl-prolyl isomerase, CyP40, disrupts tau fibrils.” **Society for Neuroscience**. November 2018. San Diego, CA. Invited Nanosymposia Speaker.
14. “Molecular chaperones regulate the pathogenicity of tau in neurodegenerative disease.” **The Hsp90 Chaperone Machine**. October 2018. Leysin, Switzerland. Invited Symposium Speaker.
15. “Regulating Tau Accumulation through Co-Chaperones That Alter Hsp90 Atpase Activity.” **Alzheimer’s Association International Conference**. July 2018. Chicago, IL. Invited Symposium Speaker.
16. “Extracellular release of neurodegenerative proteins is regulated by DnaJC5/Hsc70 complexes.” **International Society for Neurochemistry – Japanese Society for Neurochemistry Joint Symposium 2017**. Sendai, Japan. September 2017. Invited Symposium Speaker sponsored by ISN.
17. “Cyclophilin 40 untangles tau aggregates.” **Protein Misfolding Diseases and Therapy 2017**. Sendai, Japan. September 2017. Invited Symposium Speaker.
18. “Aha1 Accelerates Hsp90 ATPase Activity to Drive Tau Aggregation.” **Alzheimer’s Association International Conference**. July 2017. London, United Kingdom. Invited Symposium Speaker.
19. “High FKBP5 expression alters learning and memory.” **Midwest Stress Response and Molecular Chaperone Meeting**. Northwestern University, Evanston, IL. January 2017. Poster.

20. **"**High FKBP5 expression alters learning and memory". **Society for Neuroscience**. November 2016. San Diego, CA, Invited Nanosymposia Speaker.
21. **"**Targeting of Chaperone Activity for the Treatment of Alzheimer's Disease." **Alzheimer's Association International Conference**. July 2016. Toronto, Canada. Invited Symposium Speaker.
22. **"**Generation of a novel mouse to model *FKBP5* expression in aging and disease." **Midwest Stress Response and Molecular Chaperone Meeting**. Northwestern University, Evanston, IL. January 2015. Invited Poster.
23. **"**Epigenetic regulation of *FKBP5* expression in aging and disease." **Society for Neuroscience**, October 2014. Washington D.C., Nanosymposia Speaker.
24. **"**The Hsp90 co-chaperone FKBP51 produces neurotoxic tau oligomers: implications for aging and Alzheimer's disease." **Alzheimer's Association International Conference**, July 2013. Boston, MA. Poster.
25. **"**Age dependent increases in FKBP5/FKBP51 alter tau processing by Hsp90." **EMBO: Biomembranes**. June 2013. Cargese, Corsica, France. Invited Poster.
26. **"**FKBP51 accelerates Alzheimer's disease pathogenesis." **American Society for Neural Therapy & Repair**, April 2013. Clearwater, FL. Invited Poster.
27. **"**FKBP51 Age-Dependently Affects Cellular Processing of Tau by Hsp90." **Society for Neuroscience**. October 2012. New Orleans, LA. Invited Nanosymposia.
28. **"**In Vivo Administration of Heat Shock Protein 27 Variants; Implications for Tauopathies." **Society for Neuroscience.** October 2009. Chicago, IL. Invited Nanosymposia.
29. **"**The Effect of Hsp27 on Phosphorylated Tau." **Midwest Stress Response and Molecular Chaperone Meeting**. January 2009. Northwestern University, Evanston, IL. Invited Poster.

National and International Seminar Invitations

1. "Imbalance in molecular chaperones promotes tau pathogenesis in the aged brain." Department of Neuroscience-McKnight Brain Institute Joint Seminar Series. **University of Florida**. Gainesville, FL. Sept 2022. Invited Seminar Speaker. (Host: Jose Abisambra)
2. "Chaperone imbalance promotes tau pathogenesis." Department of Biochemistry & Biophysics Raiziss Rounds Seminar Series Speaker. **University of Pennsylvania**. Philadelphia, PA. May 2022. Invited Seminar Speaker. (Host: Jim Shorter)
3. "Hsp90 co-chaperone imbalance promotes dysfunction in the aged brain." **Hsp90 Webinars**. January 2022. (Host: Didier Picard) - Webinar
4. "Hsp90 cochaperones, FKBP52 and Aha1, promote tau pathogenesis." **Utrecht University**. CEST Seminar Series. September 2020. (Host: Stefan Rüdiger) - Webinar
5. "Controlling tau aggregate structure: a tale of two chaperones." **University of California Irvine**, UCI MIND Seminar Series. Irvine, CA. December 2018. Invited Seminar Speaker. (Host: Masashi Kitazawa)
6. "Targeting FKBP51 for the treatment of mental health disorders." **Boehringer Ingelheim**. Biberach, Germany. October 2018. Invited Seminar Speaker. (Host: Kelly Allers)
7. "Characterization of novel mouse model reveals a new role for FKBP5." **Max Planck Institute for Psychiatry**. October 2018. Munich, Germany. Invited Seminar Speaker. (Host: Elisabeth Binder)
8. "Hsp90 co-chaperones regulate tau aggregation and toxicity." **National Institute of Radiological Sciences**, Department of Functional Brain Imaging Research. Chiba, Japan. September 2017. Invited Seminar Speaker. (Host: Naruhiko Sahara)
9. "Controlling Tau Aggregate Structure and Toxicity with a Twist" **University of Texas Medical Branch**, Department of Neurology, Galveston, TX. February 2017. Invited Seminar Speaker. (Host: Rakez Kayed)

Regional and Institutional Conference and Seminar Invitations

1. "Molecular Chaperones as Regulators of Tau Function and Dysfunction" **University of South Florida, USF Health Neuroscience Institute Faculty Seminar Series**. November 2023. University of South Florida. Tampa, FL. Invited Speaker.
2. "Restoring Balance in the Tauopathic Brain." **Florida Consortium on the Neurobiology of Cognition**, May 2022. Tallahassee, FL Hybrid Format. Invited Symposium Speaker.

3. "Chaperone imbalance promotes tau pathogenesis." **University of South Florida, USF Health Neuroscience Institute Faculty Seminar Series**. May 2021. University of South Florida. Tampa, FL. Invited Speaker.
4. "Targeting FKBP5 for the treatment of stress-related disorders." **VA Research Week Symposium**. May 2019. James A. Haley Veterans' Hospital hosted at the University of South Florida. Tampa, FL. Invited Speaker.
5. "Chaperoning Tau." **USF Health Molecular Medicine Department Retreat**. March 2019. University of South Florida. Tampa, FL. Invited Speaker.
6. "Drug screening platforms in the Biology of Degenerative Diseases Lab." **USF-Irish Marine Biodiscovery Consortium Symposium.** November 2018. University of South Florida. Tampa, FL. Invited Speaker.
7. "Characterization of a novel mouse model reveals a new role for FKBP5." **University of South Florida**, **USF Health Neuroscience Faculty Seminar Series**. November 2018. University of South Florida. Tampa, FL. Invited Speaker.
8. "Aha1 stimulates tau aggregation." **Florida Annual Meeting and Exposition (FAME)** organized by the Florida Local Section of the American Chemical Society. May 2018. Invited Symposium Speaker sponsored by FLACS.
9. "Molecular chaperones regulate the pathogenicity of tau in neurodegenerative disease." **University of South Florida**, **CMMB Department Seminar Series**. Department of Cell Biology, Microbiology, and Molecular Biology. October 2017. University of South Florida, Tampa FL Invited Speaker. (Host, Sandy Westerheide)
10. **"**FKBP51 as a drug target for tauopathies." **USF Health Molecular Medicine Retreat**. March 2014. University of South Florida. Tampa, FL. Invited Speaker.
11. **"**Progressive FKBP51 increases make tau neurotoxic." **USF Molecular Medicine Department: Work In Progress Seminar Series**. November 2013. University of South Florida. Tampa, FL. Invited Speaker.
12. "Progressive FKBP51 increases make tau neurotoxic." **USF Health Seminar**, March 2013. University of South Florida. Tampa, FL. Invited Speaker.
13. **"***FKBP51/FKBP5 accelerates* Alzheimer's disease pathogenesis by slowing tau turnover and altering tau aggregate structure." **USF Health Research Day**, February 2013. University of South Florida. Tampa, FL. Invited Poster.
14. **"**FKBP51 Age-Dependently Affects Cellular Processing of Tau by Hsp90." **USF Health Neuroscience Research Day**, February 2012. University of South Florida. Tampa, FL. Invited Poster.
15. **"***In Vivo* Administration of Heat Shock Protein 27 Improves Hippocampal Plasticity." **USF Health Research Day**. February 2010. University of South Florida. Tampa, FL. Invited Poster.
16. **"**Oligomeric Hsp27 Degrades Phosphorylated Tau." **USF Undergraduate Research Symposium**, University of South Florida. Tampa, FL. March 2009. Invited Poster.

Media Appearances and Interviews

12 Jun 2024. Research referenced in "Can trauma be inherited through genes." National Geographic Can trauma be inherited through genes? (nationalgeographic.com)

3 Feb 2023. Interviewed for "The Chaperone FKBP12 Shields Tau from Aggregation." AlzForum. The Chaperone FKBP12 Shields Tau from Aggregation | ALZFORUM

31 Jan 2023. Quoted in "Alzheimer's: Can a blood test detect disease 3.5 years before diagnosis?" MedicalNewsToday. https://www.medicalnewstoday.com/articles/alzheimers-can-a-blood-test-detect-disease-3-5-years-before-diagnosis

10 Jan 2023. Collaborative research highlighted in "Potential new treatment to prevent dementia" Office of Research and Development. Veterans Affairs Research News Briefs. https://www.research.va.gov/in_brief.cfm#207124

20 Oct 2022. Collaborative research highlighted in "SARS-CoV-2 Infection Increases the Gene Expression Profile for Alzheimer's Disease Risk." https://www.usf.edu/research-innovation/pl/news/2022/covidalz.aspx

15 Aug 2022 Interviewed for “Morsani College of Medicine: the fastest rising medical school in the nation. USF Health News.” https://hscweb3.hsc.usf.edu/blog/2022/08/15/morsani-college-of-medicine-the-fastest-rising-medical-school-in-the-nation/
28 Feb 2022. Highlighted in “USF Health celebrates return of in-person Research Day. USF Health News. https://hscweb3.hsc.usf.edu/blog/2022/02/28/usf-health-celebrates-return-of-in-person-research-day/
13 May 2021. Interviewed for “SHR # 2710: New Study: Chaperone Protein Imbalance Promotes toxic Tau Buildup in The Aging Brain” Super Human Radio Podcast. https://superhumanradio.net/shr-2710-new-study-chaperone-protein-imbalance-promotes-toxic-tau-buildup-in-the-aging-brain
21 April 2021. Interviewed for “Chaperone protein imbalance promotes toxic tau buildup in the aging brain.” AZO Life Sciences. https://www.azolifesciences.com/news/20210421/Chaperone-protein-imbalance-initiates-toxic-accumulation-of-tau-in-the-aging-brain.aspx
20 April 2021. Interviewed for “Chaperone protein imbalance promotes toxic tau buildup in the aging brain.” EurekaAlert! https://www.eurekalert.org/pub_releases/2021-04/uosf-cpi042021.php
20 April 2021. Interviewed for “Chaperone protein imbalance promotes toxic tau buildup in the aging brain.” USF Health News. https://hscweb3.hsc.usf.edu/blog/2021/04/20/chaperone-protein-imbalance-promotes-toxic-tau-buildup-in-the-aging-brain/
20 April 2021. Interviewed for “Chaperone protein imbalance promotes toxic tau buildup in the aging brain.” Bioengineering.org. https://bioengineer.org/chaperone-protein-imbalance-promotes-toxic-tau-buildup-in-the-aging-brain/
20 April 2021. Interviewed for “Chaperone protein imbalance promotes toxic tau buildup in the aging brain.” Medical Xpress. https://medicalxpress.com/news/2021-04-chaperone-protein-imbalance-toxic-tau.html
20 April 2021. Interviewed for “Chaperone protein imbalance promotes toxic tau buildup in the aging brain.” Scienmag. https://scienmag.com/chaperone-protein-imbalance-promotes-toxic-tau-buildup-in-the-aging-brain/
20 April 2021. Interviewed for “Chaperone protein imbalance promotes toxic tau buildup in the aging brain.” Infosurhoy. https://infosurhoy.com/health/chaperone-protein-imbalance-promotes-toxic-tau-buildup-in-the-aging-brain.html
20 April 2021. Interviewed for “Chaperone protein imbalance promotes toxic tau buildup in the aging brain.” News Medical. https://www.news-medical.net/news/20210420/Chaperone-protein-imbalance-can-play-key-role-in-initiating-toxic-tau-buildup-in-the-aging-brain.aspx
2 October 2020. Quoted in “VCP Coding Mutation Causes a Tauopathy With Vacuoles.” AlzForum. https://www.alzforum.org/news/research-news/vcp-coding-mutation-causes-tauopathy-vacuoles
11 June 2019. Interviewed for “Early life stress plus overexpressed FKBP5 protein increases anxiety behavior.” Neuroscience News. https://neurosciencenews.com/anxiety-fkbp5-stress-14216/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+neuroscience-rss-feeds-neuroscience-news+%28Neuroscience+News+Updates%29
11 June 2019. Interviewed for “Early life stress plus overexpressed FKBP5 protein increases anxiety behavior.” Medical Express. https://medicalxpress.com/news/2019-06-early-life-stress-overexpressed-fkbp5.html
11 June 2019. Interviewed for “Early life stress plus overexpressed FKBP5 protein increases anxiety behavior.” Long Room. https://www.longroom.com/discussion/1519805/early-life-stress-plus-overexpressed-fkbp5-protein-increases-anxiety-behavior
11 June 2019. Interviewed for “Early life stress plus overexpressed FKBP5 protein increases anxiety behavior.” The Medical News. https://www.news-medical.net/news/20190611/Early-life-adversity-and-high-levels-of-FKBP5-protein-amplify-anxiety-like-behavior.aspx
11 June 2019. Interviewed for “Early life stress plus overexpressed FKBP5 protein increases anxiety behavior.” Science Daily. https://www.sciencedaily.com/releases/2019/06/190611133927.htm
11 June 2019. Interviewed for “Early life stress plus overexpressed FKBP5 protein increases anxiety behavior.” EurekAlert! https://www.eurekalert.org/pub_releases/2019-06/uosf-els061119.php
10 June 2019. Interviewed for “Early life stress plus overexpressed FKBP5 protein increases anxiety behavior.” USF Health News. https://hscweb3.hsc.usf.edu/blog/2019/06/10/early-life-stress-plus-overexpressed-fkbp5-protein-increases-anxiety-behavior/

22 May 2019. Interview highlighted in, “Neuroscientist Laura Blair’s Research Featured In ENeuro Blog.” USF Health Honors and Awards. https://hscweb3.hsc.usf.edu/awardsblog/2019/05/22/neuroscientist-laura-blairs-research-featured-in-eneuro-blog/
25 April 2019. Interviewed for “Beyond the Paper: A Conversation with Dr. Laura Blair.” eNeuro Blog. http://blog.eneuro.org/2019/04/beyond-the-paper-april
6 December 2018. PhD Student, Jeremy Baker, featured in “Newest graduates ready to shape the future of health.” USF Health News. https://hscweb3.hsc.usf.edu/blog/2018/12/06/usf-healths-newest-graduates-ready-to-shape-the-future/
26 August 2018. Highlighted in “USF Health Neuroscience Institute highlighted during Congressman’s visit.” USF Health News. https://hscweb3.hsc.usf.edu/blog/2018/08/26/usf-health-neuroscience-institute-highlighted-during-congressmans-visit/
21 December 2018. Research highlighted in “Year in Review: Key USF Health stories in 2017.” USF Health News. https://hscweb3.hsc.usf.edu/blog/2017/12/21/year-review-key-usf-health-stories-2017/
14 October 2017. Interviewed for “USF neuroscientist probes how different states of tau drive brain cell damage.” USF Health News. https://hscweb3.hsc.usf.edu/blog/2017/10/14/usf-neuroscientist-probes-different-states-tau-may-drive-brain-cell-damage/
25 Aug 2017. Interviewed by Gwenyth Dickey Zakaib for “Aha! Co-Conspirator Caught Misfolding.” AlzForum. http://www.alzforum.org/news/research-news/aha-co-conspirator-caught-misfolding
21 Aug 2017. Research Featured in “AHA1 INHIBITION REDUCES TAU ACCUMULATION.” BioCentry. https://www.biocentury.com/bc-extra/preclinical-news/2017-08-21/aha1-inhibition-reduces-tau-accumulation
30 June 2017. Research Featured in “This New Alzheimer's Discovery Could Be The Key To Future Treatments.” Forbes. https://www.forbes.com/sites/daviddisalvo/2017/06/30/researchers-may-have-just-found-the-key-to-future-alzheimers-treatments/#1738fd196d95
28 June 2017. Contributed to “Human enzyme may be key to unraveling Alzheimer's disease.” Medical News Today. http://www.medicalnewstoday.com/articles/318138.php
27 June 2017. Interview by Roni Dengler. “This human protein may unfurl toxic tangles in Alzheimer’s disease.” PBS NewsHour. http://www.pbs.org/newshour/rundown/human-protein-may-unfurl-toxic-tangles-alzheimers-disease/
27 June 2017. Interviewed for “Human enzyme can reduce neurotoxic amyloids in a mouse model of dementia.” *ScienceDaily*. www.sciencedaily.com/releases/2017/06/170627142846.htm
27 June 2017. Contributed to “A human enzyme can reduce neurotoxic amyloids in a mouse model of dementia.” EurekaAlert. https://www.eurekalert.org/pub_releases/2017-06/p-ahe062017.php
27 June 2017. Interviewed for “A human enzyme can reduce neurotoxic amyloids in mouse model of dementia.” USF Health News. https://hscweb3.hsc.usf.edu/blog/2017/06/27/human-enzyme-can-reduce-neurotoxic-amyloids-mouse-model-dementia/
27 June 2017. Research Featured in “Enzyme unravels Alzheimer’s protein in mice.” Alzheimer’s Research UK. http://www.alzheimersresearchuk.org/enzyme-unravels-alzheimers-protein-mice/
11 April 2017. Highlights from a round table discussion with Representative Kathy Castor. “Castor Protests NIH Funding Cuts.” WUSF Health News Florida. http://health.wusf.usf.edu/post/castor-protests-nih-funding-cuts#stream/0
10 April 2017. Highlights from a round table discussion with Representative Kathy Castor. “U.S. Rep. Kathy Castor meets with USF Health Researchers to discuss importance of NIH-Funded research.” USF Health News. https://hscweb3.hsc.usf.edu/blog/2017/04/10/u-s-rep-kathy-castor-meets-usf-health-researchers-discuss-importance-nih-funded-research/
10 September 2013. Research Featured in “Chaperone “Saves” Tau, Turning it into Toxic Oligomers.” AlzForum. https://www.alzforum.org/news/research-news/chaperone-saves-tau-turning-it-toxic-oligomers
4 September 2013. Research Featured in “Stress-related protein speeds progression of Alzheimer's disease.” ScienceDaily. https://www.sciencedaily.com/releases/2013/09/130904094112.htm
3 September 2013. Research Featured in “Stress-related protein speeds progression of Alzheimer’s disease.” USF Health News https://hscweb3.hsc.usf.edu/blog/2013/09/03/stress-related-protein-speeds-progression-of-alzheimers-disease-video/

22 February 2013. Poster Presentation award mentioned in, "USF Health Research Day 2013: Emerging Scientists and Top-Tier Research." USF Health News. https://hscweb3.hsc.usf.edu/blog/2013/02/22/usf-health-research-day-2013-emerging-scientists-and-top-tier-research/

8 December 2010. Research Featured in "Dynamics of chaperone protein critical in rescuing brains of Alzheimer's mice from neuron damage." ScienceDaily. https://www.sciencedaily.com/releases/2010/12/101203091449.htm

Outreach Activities

May 15, 2024	How to get involved in VA Research Discussion Panelist, VA Research Day, Tampa, FL
November 16, 2023	Great American Teach-in Winthrop Charter School, Brandon, FL
October 30, 2023	Invited Session Chair for 12th International Symposium on Heat Shock Proteins in Biology, Medicine and the Environment. Session 5 Chaperone Networks, Co-chaperones in the Stress Response and as Targets for Therapy. Old Town Alexandria, VA.
October 11, 2023	Invited Session Chair for Southeastern Neurodegenerative Disease Conference, Session 3: Lightning Presentations. Atlanta, GA.
November 17, 2022	Great American Teach-in Winthrop Charter School, Brandon, FL
May 5, 2022	BrightFocus Alzheimer's Disease Panelist and Moderator, Cypress Cove, Ft. Myers, FL
November 18, 2021	Great American Teach-in Winthrop Charter School, Brandon, FL
November 4, 2021	Virtual Field Trip for 4th graders from Saint Paul's - Clearwater's Independent School to USF Health MCOM, Tampa FL
April 30, 2020	Impact of COVID-19 on Basic Science: Wet Lab and Animal Work. Alzheimer's Association Awardees Discussion Panelist. Alzheimer's Association. Webinar.
November 21, 2019	Great American Teach-in Winthrop Charter School, Brandon, FL
October 23, 2019	Invited Session Chair for the Society for Neuroscience, Session 631, Cellular Mechanisms of Tauopathies, Chicago, IL.
October 22, 2019	Social Co-Chair for the Society for Neuroscience-Sponsored Social-Alzheimer's and Related Dementias, Chicago, IL.
February 5, 2019	CMMB Spring Faculty Research Showcase, USF, Tampa FL
November 7, 2018	Invited Session Chair for the Society for Neuroscience, Session 714, Alzheimer's Disease and Other Dementias: Tau: Experimental Models, San Diego, CA.
November 6, 2018	Social Chair for the Society for Neuroscience-Sponsored Social-Alzheimer's and Related Dementias, San Diego, CA.
July 22, 2018	Invited Session Chair for Alzheimer's Association International Conference, Session 01-06, Molecular and cell Biology: Pathophysiology of Tau, Chicago, IL.
March 9, 2018	J. W. Mitchell Field Trip to USF Health MCOM, Tampa FL
January 20, 2018	Winthrop Charter School Science Fair Judge, Brandon, FL
November 16, 2017	Great American Teach-in Winthrop Charter School, Brandon, FL
November 19, 2015	Great American Teach-in Winthrop Charter School, Brandon, FL

Committee Service

2023-Present	Research Service Pipeline Workgroup, JAHVA
2023-Present	Research Service Awards Committee Chair, JAHVA
2023	SENDCon 2023 Co-organizer
2022-Present	Research and Development Committee (RDC), JAHVA
2021-Present	NSI Faculty Search Committee
2021-Present	S10 Local Advisory Committee Member
2020-Present	USF Health MD/PhD Program Interviewer
2020-2024	NSI Special Seminar Series Co-Organizer
2020-2021	Morsani College of Medicine Committee on Research (COMCOR)
2019-Present	Institutional Animal Care and Use Committee (IACUC), University of South Florida and JAHVA
2018-2023	SENDCon Promotion Committee USF Representative
2018-Present	USF Health Biomedical Sciences PhD Program Interviewer
2017-2019	USF Health Molecular Medicine Faculty Recruitment Committee

Review Committees

Grant Review:

2024 External Grant Reviewer; Alzheimer's Association and NACC New Investigators Awards Program (NIAP)
2024 NIH Special Emphasis Grant Review Panel
2024 External Grant Reviewer; Rainwater Charitable Foundation
2024 External Grant Reviewer; Alzheimer's Association
2023 External Grant Reviewer; Alzheimer's Association
2022- 2023 Standing member for NIH/DMPB Study Section (2022-2023)
2022 External Grant Reviewer; Alzheimer Forschung Initiative (AFI) e.V.
2022 NIH NIA Special Emphasis Grant Review Panel
2022 External Grant Reviewer; 1Florida ADRC
2022 Alzheimer's Association Research Grant Review Committee
2021 External Grant Reviewer; Alzheimer's Society
2021 External Grant Reviewer; Alzheimer's Research UK
2021 External Grant Reviewer; Edward N. & Della L. Thome Memorial Foundation
2021 External Grant Reviewer; Wellcome Trust/DBT India Alliance
2021 Alzheimer's Association Research Grant Review Committee
2021 External Grant Reviewer; Natural Sciences and Engineering Research Council of Canada (NSERC)
2020 External Grant Reviewer; Wellcome Trust/DBT India Alliance
2020 External Grant Reviewer; National Science Centre (NCN); Review Panel NZ5
2020 External Grant Reviewer; National Science Centre (NCN); Review Panel NZ7
2020 External Grant Reviewer; Natural Sciences and Engineering Research Council of Canada (NSERC)
2019 External Grant Reviewer; Alzheimer's Research UK
2019 External Grant Reviewer; National Science Centre (NCN); Review Panel NZ5
2019 External Grant Reviewer; Medical Research Council (MRC)
2019-2022 Standing member for NIH/DDNS Study Section (2019-2022)
2019 External Grant Reviewer; Deutsche Forschungsgemeinschaft (DFG)
2019 External Advisory Committee Member for NIH/DDNS Study Section (Summer)
2019 External Advisory Committee Member for NIH/DDNS Study Section (Spring)
2019 External Grant Reviewer; Alzheimer's Association
2018 External Advisory Committee Member for NIH/DDNS Study Section (Summer)
2018 External Advisory Committee Member for NIH/DDNS Study Section (Spring)
2018 External Advisory Committee Member for NIH/ZRG1-MDCN-C-58 Study Section (Spring)
2018 External Grant Reviewer; Alzheimer's Society United Against Dementia
2018 External Grant Reviewer; Alzheimer's Association
2018 External Grant Reviewer; The Royal Society
2017 External Grant Reviewer; Alzheimer's Research UK
2017 USF Health Internal Grant Review

Award and Scholarship Review:

2024 VA Research Week Poster Judge
2024 USF Health Research Day Poster Judge
2023 2nd International Symposium on The Chaperone Code Graduate Student Presentation Judge.
2023 VA Research Week Poster Judge
2023 USF Health Research Day Poster Judge
2022 USF Health Research Day Poster Judge
2021 USF Health Department of Molecular Medicine Retreat Poster Judge

2021	USF Health Research Day Poster Judge
2020	USF Health Research Day Poster Judge
2019-Present	Edith Wright Hartley Ph.D. Grad Scholarship Committee Chair
2019	Chih Foundation Research and Publication Award Committee
2019	USF Health Molecule Medicine Retreat Poster Judge
2017	USF Health Research Day Poster Judge

Editorial Boards:

2023-Present	Senior Editor – Cell Stress and Chaperones
2023-Present	Handling Editor – Journal of Neurochemistry
2022-2023	Associate Editor – Frontiers in Molecular Biosciences - Protein Folding, Misfolding and Degradation
2022-Present	Review Editor – Frontiers in Dementia – Cellular and Molecular Mechanism of Dementia

Manuscript Review:

Acta Neuropathologica
Molecular Cell
Nature Communications
Biological Psychiatry
Molecular Psychiatry
Cell Research
ACS Central Science
Neurobiology of Aging
Neurobiology of Stress
Scientific Reports
ACS Chemical Neuroscience
ACS Chem Biol
BMC Biology
Brain Communications
Journal of Neuroscience
Acta Neuropathologica Communications
Alzheimer's Research & Therapy
Cell Stress and Chaperones
Apoptosis
Aging Cell
FEBS Letters
Expert Opinion on Therapeutic Targets
Biochemical Society Transactions
Neuropharmacology
Journal of Alzheimer's Disease
Biochemical Society Transactions
Cellular and Molecular Life Sciences
Alzheimer's & Dementia
PLoS Pathogens
PLoS One
Brain Communications
Brain Research
Current Opinion on Structural Biology
Frontiers in Neuroscience
Frontiers in Pharmacology
Frontiers in Molecular Biosciences
Frontiers in Aging Neuroscience
Frontiers in Genetics
Biophysical Journal
International Journal of Biological Macromolecules
International Journal of Molecular Sciences
British Journal of Pharmacology
Brain Sciences
Journal of Psychiatric Research
Journal of Affective Disorders
Biomedicine & Pharmacotherapy
Journal of Ophthalmology
Neuroscience
Aging Research Reviews
Journal of Biological Inorganic Chemistry
Journal of Cellular Biochemistry
Biomolecules
EbioMedicine
World Journal of Biological Psychiatry
Biomolecular Concepts

Professional Memberships

2023-Present	Member, International Society for Neurochemistry
2022-Present	Member, USF Academy of Inventors
2016-Present	Member, Society for Neuroscience
2017-Present	Member, ISTAART
2015	Postdoc Member, Society for Neuroscience.
2013	Student Member, ISTAART
2009-2014	Student Member, Society for Neuroscience

Awards

2023: Douglas Scholar, Harrington Brain Health Medicines Center
2023: Outstanding Performance Rating: Office of Veterans Affairs
2021: Outstanding Performance Rating: Office of Veterans Affairs
2017: Alzheimer's Association International Conference Travel Fellowship
2014: Best Poster Award: USF Molecular Medicine Retreat
2013: Alzheimer's Association International Conference Travel Fellowship
2013: American Society for Neural Therapy and Repair Travel Fellowship
2013: Best Poster Award: Phelps Travel Scholarship at USF Health Research Day
2012: Outstanding Poster Award and Scholarship for University of South Florida Neuroscience Research Symposium
2009: Student Government Travel Award
2009: 2nd Place Award and Scholarship for poster at the University of South Florida Undergraduate Research Symposium

Other

2019-2020 Consultant, Alkermes

Teaching

First-Year Medical Student Lectures:

2017- Present	BMS6818 "Cancer Biology" 2 hours of lecture/year on Protein Targeting and Protein Turnover
2024-Present	BMS6641 "Neurological System" 2 hours of lecture/year on Corticolimbic Systems and Higher Order Functions

Graduate Medical Sciences:

2023	GMS6942 "Lab Rotations in Biomedical Sciences" Supervised directed research conducted by students in my laboratory
2022	GMS6942 "Lab Rotations in Biomedical Sciences" Supervised directed research conducted by students in my laboratory
2019 – Present	GMS6706 "Basic Medical Neurosciences" 3 hours of lecture/year on Neuronal Communication and Neurochemical circuitry and Translational Neuroscience: Mood disorders and Schizophrenia
2020	GMS6942 "Lab Rotations in Biomedical Sciences" Supervised directed research conducted by students in my laboratory
2019 – Present	GMS6604 "Human Structure and Function" 2 hours of lecture/year on Neurodegeneration and Proteinopathies/Neural diseases
2018 – Present	GMS6001 "Foundation in Biomedical Science" 4 hours of lecture/year on Neurotransmission and Neurodegeneration with an article discussion
2018 – Present	GMS7930 "Advanced Neuroscience" 2 hours of lecture/year on CNS diseases and Chaperones
2018	GMS6942 "Lab Rotations in Biomedical Sciences" Supervised directed research conducted by students in my laboratory
2017 – Present	GMS7910 "Directed Research" Supervised directed research by the students listed below.
2017 – Present	GMS7980 "Doctoral Dissertation" Supervised dissertation research conducted by the students listed below.
2017 – 2023	BCH6727 "Molecular Basis of Disease" 6 hours of lecture/year on Neurodegenerative diseases
2017 – 2018	GMS7930 "Principles of Molecular Medicine" 2 hours of lecture/year on Neurodegeneration and Proteinopathies/Neural diseases

Undergraduate

2021 – 2022	IDH4970 “Honors Thesis” Supervised directed research of honors students to fulfill their thesis requirement
2021	PCB 4024 “Molecular Biology of the Cell” – Guest lecturer
2018 – 2019	IDH4970 “Honors Thesis” Supervised directed research of honors students to fulfill their thesis requirement
2019	IDS4914 “Advanced Undergraduate Research Experience” – supervised undergraduate honors students

Mentoring

Faculty and Research Associates

2016-2022	J. Matt Webster, Research Assistant Professor, Department of Molecular Medicine, University of South Florida Morsani College of Medicine. *Currently Project Manager at Sartorius Stedim Biotech.*
2016-2017	Dali Zheng, Research Associate, Department of Molecular Medicine, University of South Florida Morsani College of Medicine. *Currently Professor at Fujian Medical University, Fujan, China.*
2016-2017	Leonid Breydo, Research Associate, Department of Molecular Medicine, University of South Florida Morsani College of Medicine. *Currently Staff Scientist at Regeneron.*

Senior Scientists

2024-Present	Oksana Fihurka, Senior Research Scientist, Department of Molecular Medicine, University of South Florida Morsani College of Medicine
2022-2024	Shannon Hill, Senior Research Scientist, Department of Molecular Medicine, University of South Florida Morsani College of Medicine, *Currently tenure-track Assistant Professor at the University of South Florida Department of Chemistry*
2019-2022	Shannon Hill, Scientific Researcher, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

Postdoctoral Fellows

2023-Present	Andrea Del Pilar Contreras Marciales, Postdoctoral Scholar, Department of Molecular Medicine, University of South Florida Morsani College of Medicine
2016-2021	Marangelie Criado-Marrero, Postdoctoral Fellow, Department of Molecular Medicine, University of South Florida Morsani College of Medicine, *Currently Research Assistant Professor at the University of Florida, Gainesville, FL.*
2018	Mai Mohamed, Postdoctoral Scholar, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

Doctoral Dissertations Directed

2024-Present	Baliqis Olukade, Department of Molecular Medicine, University of South Florida Morsani College of Medicine
2021-Present	Abigail Esquivel, Department of Molecular Medicine, University of South Florida Morsani College of Medicine
2020-Present	Niat Gebru, Department of Molecular Medicine, University of South Florida Morsani College of Medicine
2018-2022	Santiago Rodriguez Ospina, Department of Molecular Medicine, University of South Florida Morsani College of Medicine, *Currently Postdoctoral Fellow in the lab of Daniel Dempsey at Boston University, Boston, MA.*
2016-2018	Jeremy Baker, Department of Molecular Medicine, University of South Florida Morsani College of Medicine, *Senior Postdoctoral Fellow in the lab of Brian Kraemer, University of Washington; Deceased March 2022.*

2016-2018 Lindsey Shelton (Kirkland), Department of Molecular Medicine, University of South Florida Morsani College of Medicine; *Currently a Medical Writer.*

Doctoral Dissertation Committees

2024-Present Claire Blanchard, Department of Molecular Biosciences, University of South Florida, College of Arts and Sciences

2023-Present Alex Leake, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

2023-Present Austin Fajfer, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

2023-Present Marsilla Gray, Department of Molecular Pharmacology and Physiology, University of South Florida Morsani College of Medicine

2023-Present Natasha Ram, MD/PhD student, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

2022-Present Nhi Truong, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

2022-Present Marilyn Ikhane, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

2022-Present Danielle Blazier, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

2021-2023 Minkyung Kang, Department of Molecular Pharmacology and Physiology, University of South Florida Morsani College of Medicine

2020-Present Jenet Matlack, Moffitt Cancer Center and Department of Molecular Medicine, University of South Florida Morsani College of Medicine

2020-Present Monica Moore, MD/PhD student, Department of Molecular Pharmacology and Physiology, University of South Florida Morsani College of Medicine

2019-2022 Melissa Bikowitz, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

2019-2023 Sara Cazzaro, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

2019-2022 Ahmed Ramadan, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

2018-2020 Jeremy Barton, Department of Physics, University of South Florida, College of Arts and Sciences

2017-2020 Meena Subbarayan, Department of Neurosurgery and Brain Repair, University of South Florida Morsani College of Medicine

2016-2020 Nicole Avalon, Department of Chemistry, University of South Florida, College of Arts and Sciences

2018-2019 Andrea Lemus (Committee Chair and Defense Chair), Department of Chemistry, University of South Florida, College of Arts and Sciences

2017-2019 April Darling, Department of Molecular Medicine, University of South Florida Morsani College of Medicine

Visiting Scholars

2023 Kevin Catalfano, Department of Biochemistry, University of Notre Dame

PhD Comprehensive Qualifying Exams Outside Chair

November 30, 2023 John Faulkner, “Roles of microglial heparan sulfate in brain homeostasis and Alzheimer’s disease,” Department of Molecular Pharmacology and Physiology, University of South Florida

Doctoral Dissertation Defense Outside Chair

August 20, 2019 Chamani Niyangoda, “Amyloid Protein Aggregation and Associated Toxicity,” Department of Physics, University of South Florida

Master’s Thesis Supervised

2022-2023 Emma Tumarkin, “Autophagy and Insulin Signaling Markers in rTgFKBP5 Transgenic Mice”. University of South Florida Morsani College of Medicine

2021-2023 Luis Flores Lopez, “Overexpression of FK506-binding protein 51 in combination with external stressors contributes to the desynchronization of circadian rhythmicity” University of South Florida Morsani College of Medicine

2020-2022 Daniel Paolillo, “The In Vitro Role of Human Cyclophilins in Regulating Tau Accumulation” University of South Florida Morsani College of Medicine

2018-2020 Taylor Sanders, University of South Florida Morsani College of Medicine

2017-2018 Sheldon Lord, “Rescuing of ΔF508-CFTR trafficking through small molecule inhibition of Aha1.” University of South Florida Morsani College of Medicine

2017 Ricardo Cordova, “Models and Therapeutic Strategies for Open Angle Glaucoma.” University of South Florida Morsani College of Medicine

2016-2017 Khalid Muhammad, “Molecular cloning and heterologous protein expression of BDNF and GDNF.” University of South Florida College of Public Health

Undergraduate Honors Thesis Supervised

2021-2022 Miguel Gomez

2018-2019 Andrew Falkowitz

Undergraduate Honors Thesis Committee

2020 Lukas Oliveira Coelho

2016-2017 John Blizzard

2014-2015 Wei Lue Tong

2013-2014 Haley Frauen

Undergraduate Research Advisor for over 65 students over the past 9 years.

Awards of staff, students, and postdoctoral trainees

Laura Verdina

- Outstanding Poster Award, VA Research Day 2024

Abigail Esquivel

- Edith Wright Hartley PhD Scholarship, 2023
- Dorothy Benjamin Graduate Fellowship in Alzheimer’s Disease, 2023 - 2024
- NIH/NIA F31 Ruth L. Kirschstein Predoctoral Individual National Research Service Award # 1F31 AG082505, 2023 - 2026
- SENDCon Alzheimer’s Association Travel Fellowship, 2022
- Krzanowski Career Development Award Summer, 2022

Niat Gebru

- 32nd Annual Conference of the American Society for Neural Therapy & Repair Travel Award, 2024
- Krzanowski Career Development Award Spring, 2024
- Oral Presenter Award, USF Health Research Day, 2024
- Chih Foundation Research and Publication Award, 2023
- SENDCon Alzheimer’s Association Travel Fellowship, 2023
- Pfizer’s Pharmaceutical Careers and Postdoctoral Opportunities Educational Event Travel Award, 2023
- AMSGS Involvement Award, 2023

- Dr. Christopher P. Phelps Memorial Fund Annual Morsani College of Medicine Neuroscience Student Travel Award, 2023
- Krzanowski Career Development Award Fall, 2022
- Dorothy Benjamin Graduate Fellowship in Alzheimer's Disease, 2022 - 2023
- Krzanowski Career Development Award Summer, 2022
- Best Neuroscience Poster, USF Health Research Day, 2021

Santiago Rodriguez Ospina

- 28th Annual Conference of the American Society for Neural Therapy & Repair Travel Award, 2021
- Dorothy Benjamin Graduate Fellowship in Alzheimer's Disease, 2020

Marangelie Criado-Marrero

- Alzheimer's Association Research Fellowship to Promote Diversity (AARF-D), Award # 2019-AARFD-644407, 2019 - 2021
- Latin American Training Program (LATP), 2019-2020
- USF Postdoctoral Travel Award, selected by the Office of Postdoctoral Affairs to attend National Postdoctoral Association Annual Conference, 2019
- First Place Oral Presentation Award, USF Postdoctoral Research Symposium, University of South Florida, Tampa, FL 2019
- Society for Neuroscience Trainee Professional Development Award, 2018
- International Behavioral Neurosciences Society Postdoctoral Travel Award, Japan, 2017
- Neuroscience Scholars Program (NSP), Society for Neuroscience Training program, 2017

David Beaulieu-Abdelahad

- USF Outstanding Staff Award, 2019

Jeremy Baker

- Chih Foundation Research and Publication Award, 2018
- Alzheimer's Association International Conference Travel Fellowship, 2018
- Association of Medical Sciences Graduate Students Travel Award, 2018
- USF Health Vice President's Award for Outstanding Invited Oral Presentation, 2018
- Cold Spring Harbor Travel Stipend, 2018
- Dr. Christopher P. Phelps Memorial Fund Annual Morsani College of Medicine Neuroscience Student Travel Award, 2017
- University of South Florida Office of Graduate Studies Travel Grant 2017

Lindsey Shelton

- American Society for Neural Therapy and Repair Travel Fellowship, 2018
- USF Health Office of Research Student Travel Award, 2017
- USF Health American Medical Sciences Graduate Students Travel Award, 2017

Amirthaa Suntharalingam

- Outstanding Undergraduate Poster Presentation, Neurosciences USF Health Research Day, 2017