University of South Florida

## Joshua J. Gamsby, Ph.D.

USF Health Byrd Alzheimer Institute

Morsani College of Medicine, University of South Florida

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**EDUCATION** 

2001 - 2005

ACADEMIC APPOINTMENTS

Lab Website: <a href="https://gamsbylab.weebly.com/">https://gamsbylab.weebly.com/</a>



# Curriculum Vitae

Ph.D., Biochemistry and Molecular Biology

| ACADEMIC AT I OINTMENTS |                     |   |
|-------------------------|---------------------|---|
| 2005 - 2012             | Postdoctoral Fellow | Department of Genetics, Geisel School of Medicine at Dartmouth                        |
| 2012 - 2014             | Research Associate  | Department of Molecular Medicine, College of Medicine, University of South Florida    |
| 2014 - 2022             | Assistant Professor | Department of Molecular Medicine, College of<br>Medicine, University of South Florida |
| 2022 - Present          | Associate Professor | Department of Molecular Medicine, College of<br>Medicine, University of South Florida |

#### **GRANTS AND FINANCIAL AWARDS**

## **ACTIVE:**

2022 – 2027 1R01AA029678-01A1, "Effects of circadian desynchrony during adolescent alcohol exposure on immediate and long-term risk of alcohol addiction: role of sleep homeostasis and stress signaling." National Institute of Health, **Role: Co-I.** 

## **COMPLETED:**

2019 – 2022 Ed and Ethel Moore Alzheimer's Disease Standard Grant (\$250,000), "Investigation of Alzheimer's Disease-induced Circadian Dysfunction on Tau Production and Phosphorylation." State of Florida, **Role: PI**.

2019 – 2020 Interdisciplinary Seed Grant (\$50,000), "Emerging crosstalk of circadian rhythm dysfunction and polyamine metabolism in Alzheimer's disease." University of South Florida, **Role: Co-PI.** 

- 2017 –2019 Ed and Ethel Moore Alzheimer's Disease Pilot Research Grant (\$100,00), "Circadian Rhythm Dysfunction and Tauopathy." State of Florida, **Role: PI.**
- 2016 2018 Alzheimer's Association New Investigator Research Grant (\$100,000), "Circadian Rhythm Dysfunction and Tauopathy." Alzheimer's Association, **Role: PI.**
- 2015 2016 Byrd Alzheimer's Institute Small Grants Award (\$12,500), Byrd Alzheimer's Institute, University of South Florida, Correction of Circadian Rhythm Disorders in Models of Alzheimer's Disease, **Role: PI.**
- 2014 2015 Byrd Alzheimer's Institute Small Grants Award (\$25,000), Byrd Alzheimer's Institute, University of South Florida, Correction of Circadian Rhythm Disorders in Models of Alzheimer's Disease, **Role: PI.**
- 2011 2012 Hitchcock Foundation Pilot Grant, PI (\$28,750) Investigating the role of the circadian period genes in modulating the effects of the atypical antipsychotic clozapine on the alcohol drinking and preference in alcohol-preferring mouse strains. **Role: Co-PI.**

## **PUBLICATIONS**

- 1. Mahoney HL, Bloom CA, Justin HS, Capraro BM, Morris C, Gonzalez D, Sandefur E, Faulkner J, Reiss S, Valladares A, Ocampo A, Carter B, Lussier AL, Dinh LP, Weeber E, **Gamsby J**, Gulick D. DISC1 and reelin interact to alter cognition, inhibition, and neurogenesis in a novel mouse model of schizophrenia. Front Cell Neurosci. 2024 Jan 12;17:1321632. doi: 10.3389/fncel.2023.1321632. eCollection 2023. PMID: 38283751
- 2. Gonzalez D, Justin H, Samantha Reiss, Faulkner J, Mahoney H, Yunis A, **Gamsby J**, Gulick D. Circadian rhythm shifts and alcohol access in adolescence synergistically increase alcohol preference and intake in adulthood in male C57BL/6 mice. Behavioral Brain Research. Feb 13;438:114216. doi: 10.1016/j.bbr.2022.114216. Epub 2022 Nov 16. PMID: 36400236
- 3. Araujo I, Henriksen A, **Gamsby J**, Gulick D. Impact of Alcohol Abuse on Susceptibility to Rare Neurodegenerative Diseases. Front Mol Biosci. 2021;8:643273. Epub 2021/06/29. doi: 10.3389/fmolb.2021.643273. PubMed PMID: 34179073; PMCID: PMC8220155.
- 4. Sandusky-Beltran LA, Kovalenko A, Placides DS, Ratnasamy K, Ma C, Hunt JB, Jr., Liang H, Calahatian JIT, Michalski C, Fahnestock M, Blair LJ, Darling AL, Baker JD, Fontaine SN, Dickey CA, **Gamsby JJ**, Nash KR, Abner E, Selenica MB, Lee DC. Aberrant AZIN2 and polyamine metabolism precipitates tau neuropathology. J Clin Invest. 2021;131(4). Epub 2021/02/16. doi: 10.1172/JCI126299. PubMed PMID: 33586680; PMCID: PMC7880423.
- 5. Mahoney H, Peterson E, Justin H, Gonzalez D, Cardona C, Stevanovic K, Faulkner J, Yunus A, Portugues A, Henriksen A, Burns C, McNeill C, **Gamsby J**, Gulick D. Inhibition of casein kinase 1

delta/epsilon improves cognitive performance in adult C57BL/6J mice. Sci Rep. 2021;11(1):4746. Epub 2021/02/28. doi: 10.1038/s41598-021-83957-9. PubMed PMID: 33637777; PMCID: PMC7910436.

- 6. Carter B, Justin HS, Gulick D, **Gamsby JJ**. The Molecular Clock and Neurodegenerative Disease: A Stressful Time. Front Mol Biosci. 2021;8:644747. Epub 2021/04/24. doi: 10.3389/fmolb.2021.644747. PubMed PMID: 33889597; PMCID: PMC8056266.
- 7. Beesley S, Kim DW, D'Alessandro M, Jin Y, Lee K, Joo H, Young Y, Tomko RJ, Jr., Faulkner J, **Gamsby J**, Kim JK, Lee C. Wake-sleep cycles are severely disrupted by diseases affecting cytoplasmic homeostasis. Proc Natl Acad Sci U S A. 2020;117(45):28402-11. Epub 2020/10/28. doi: 10.1073/pnas.2003524117. PubMed PMID: 33106420; PMCID: PMC7668169.
- 8. Sundaram S, Nagaraj S, Mahoney H, Portugues A, Li W, Millsaps K, Faulkner J, Yunus A, Burns C, Bloom C, Said M, Pinto L, Azam S, Flores M, Henriksen A, **Gamsby J**, Gulick D. Inhibition of casein kinase 1delta/epsilonimproves cognitive-affective behavior and reduces amyloid load in the APP-PS1 mouse model of Alzheimer's disease. Sci Rep. 2019;9(1):13743. Epub 2019/09/26. doi: 10.1038/s41598-019-50197-x. PubMed PMID: 31551449; PMCID: PMC6760153.
- 9. Gulick D, **Gamsby JJ**. Racing the clock: The role of circadian rhythmicity in addiction across the lifespan. Pharmacol Ther. 2018;188:124-39. Epub 2018/03/20. doi: 10.1016/j.pharmthera.2018.03.003. PubMed PMID: 29551440.
- 10. Stevanovic K, Yunus A, Joly-Amado A, Gordon M, Morgan D, Gulick D, **Gamsby J**. Disruption of normal circadian clock function in a mouse model of tauopathy. Exp Neurol. 2017;294:58-67. Epub 2017/05/04. doi: 10.1016/j.expneurol.2017.04.015. PubMed PMID: 28461004.
- 11. **Gamsby JJ**, Pribish AM, Stevanovic KD, Yunus A, Gulick D. Alcohol Intake Increases in Adolescent C57BL/6J Mice during Intermittent Cycles of Phase-Delayed, Long-Light Conditions. Front Behav Neurosci. 2017;11:152. Epub 2017/09/08. doi: 10.3389/fnbeh.2017.00152. PubMed PMID: 28878635; PMCID: PMC5573537.
- 12. **Gamsby JJ**, Gulick D. Chronic shifts in the length and phase of the light cycle increase intermittent alcohol drinking in C57BL/6J mice. Front Behav Neurosci. 2015;9:9. Epub 2015/02/19. doi: 10.3389/fnbeh.2015.00009. PubMed PMID: 25691862; PMCID: PMC4315044.
- 13. **Gamsby JJ**, Templeton EL, Bonvini LA, Wang W, Loros JJ, Dunlap JC, Green AI, Gulick D. The circadian Per1 and Per2 genes influence alcohol intake, reinforcement, and blood alcohol levels. Behav Brain Res. 2013;249:15-21. Epub 2013/04/24. doi: 10.1016/j.bbr.2013.04.016. PubMed PMID: 23608482; PMCID: PMC3672323.
- 14. Grant GD, **Gamsby J**, Martyanov V, Brooks L, 3rd, George LK, Mahoney JM, Loros JJ, Dunlap JC, Whitfield ML. Live-cell monitoring of periodic gene expression in synchronous human cells

identifies Forkhead genes involved in cell cycle control. Mol Biol Cell. 2012;23(16):3079-93. Epub 2012/06/29. doi: 10.1091/mbc.E11-02-0170. PubMed PMID: 22740631; PMCID: PMC3418304.

- 15. Poliandri AH, **Gamsby JJ**, Christian M, Spinella MJ, Loros JJ, Dunlap JC, Parker MG. Modulation of clock gene expression by the transcriptional coregulator receptor interacting protein 140 (RIP140). J Biol Rhythms. 2011;26(3):187-99. Epub 2011/06/02. doi: 10.1177/0748730411401579. PubMed PMID: 21628546; PMCID: PMC3207295.
- 16. Heim KC, **Gamsby JJ**, Hever MP, Freemantle SJ, Loros JJ, Dunlap JC, Spinella MJ. Retinoic acid mediates long-paced oscillations in retinoid receptor activity: evidence for a potential role for RIP140. PLoS One. 2009;4(10):e7639. Epub 2009/10/29. doi: 10.1371/journal.pone.0007639. PubMed PMID: 19862326; PMCID: PMC2763268.
- 17. **Gamsby JJ**, Loros JJ, Dunlap JC. A phylogenetically conserved DNA damage response resets the circadian clock. J Biol Rhythms. 2009;24(3):193-202. Epub 2009/05/26. doi: 10.1177/0748730409334748. PubMed PMID: 19465696; PMCID: PMC3683861.
- 18. Loros JJ, Dunlap JC, Larrondo LF, Shi M, Belden WJ, Gooch VD, Chen CH, Baker CL, Mehra A, Colot HV, Schwerdtfeger C, Lambreghts R, Collopy PD, **Gamsby JJ**, Hong CI. Circadian output, input, and intracellular oscillators: insights into the circadian systems of single cells. Cold Spring Harb Symp Quant Biol. 2007;72:201-14. Epub 2008/04/19. doi: 10.1101/sqb.2007.72.067. PubMed PMID: 18419278; PMCID: PMC3671946.
- 19. Dunlap JC, Loros JJ, Colot HV, Mehra A, Belden WJ, Shi M, Hong CI, Larrondo LF, Baker CL, Chen CH, Schwerdtfeger C, Collopy PD, **Gamsby JJ**, Lambreghts R. A circadian clock in Neurospora: how genes and proteins cooperate to produce a sustained, entrainable, and compensated biological oscillator with a period of about a day. Cold Spring Harb Symp Quant Biol. 2007;72:57-68. Epub 2008/06/05. doi: 10.1101/sqb.2007.72.072. PubMed PMID: 18522516; PMCID: PMC3683860.
- 20. Wang JW, **Gamsby JJ**, Highfill SL, Mora LB, Bloom GC, Yeatman TJ, Pan TC, Ramne AL, Chodosh LA, Cress WD, Chen J, Kerr WG. Deregulated expression of LRBA facilitates cancer cell growth. Oncogene. 2004;23(23):4089-97. Epub 2004/04/06. doi: 10.1038/sj.onc.1207567. PubMed PMID: 15064745.

#### PRESENTATIONS AND SEMINARS

- 2022 Invited speaker, "A Time to Remember: Circadian Dysfunction and Alzheimer's Disease", USF Health Byrd Neuroscience Institute Seminar Series, Tampa, FL.
- 2021 Invited speaker, "Untangling the Etiology of Circadian Clock Dysfunction in Alzheimer's disease", Rutgers University, New Brunswick, New Jersey.
- 2019 Invited speaker, "Untangling the Etiology of Circadian Clock Dysfunction in Alzheimer's disease", Rensselaer Polytechnic Institute, Troy, New York.

- 2019 Invited speaker, "Untangling the Etiology of Circadian Clock Dysfunction in Alzheimer's disease" USF Health Byrd Neuroscience Institute Seminar Series, Tampa, FL.
- 2018 Invited speaker, "Untangling the Etiology of Circadian Clock Dysfunction in Alzheimer's disease" Society for Research on Biological Rhythms Biennial Meeting, Amelia Island, FL.
- 2017 Presenter, "Tauopathy and Circadian Dysfunction", Time of our Lives: Circadian Clock Mechanisms Symposium, Hanover NH.
- 2016 Invited Speaker, "Neurodegenerative Disease and Circadian Clock Dysfunction: Untangling the Role of Tauopathy", Society for Research on Biological Rhythms Biennial Meeting, Palm Harbor, FL.
- 2013 Invited Speaker, "Cellular and Behavioral Characteristics of the Mammalian Circadian Clock". Department of Molecular Medicine, USF, Tampa, FL.
- 2012 Invited Speaker, "Cellular and Behavioral Characteristics of the Mammalian Circadian Clock". USF Health Byrd Alzheimer's Institute, Tampa, FL.
- 2012 Poster Presentation, "The Circadian *Period* Genes and Time of Treatment Modulate the Effects of Clozapine on Alcohol Drinking in a Sex-dependent Manner", Society for Research on Biological Rhythms Biennial Meeting, Sandestin, FL.
- 2011 Poster Presentation, "The Circadian *Period* Genes and Time of Treatment Modulate the Effects of Clozapine on Alcohol Drinking in a Sex-dependent Manner", Annual Society for Neuroscience meeting, Washington D.C. 2011
- 2011 Poster Presentation, "The Circadian *Period* Genes and Time of Treatment Modulate the Effects of Clozapine on Alcohol Drinking in a Sex-dependent Manner", Neuroscience Center Day, Dartmouth Medical School, NH.
- 2010 Poster Presentation, "RIP140 is a Conduit for Circadian Control of Genes Involved in Hormonal Output", Society for Research on Biological Rhythms Biennial Meeting, Sandestin, FL.
- 2009 Poster Presentation, "RIP140 is a Conduit for Circadian Control of Genes Involved in Hormonal Output", Chronobiology Gordon Conference, Salve Regina University, RI. 2009
- 2008 Poster Presentation, "DNA Damage Resets the Mammalian Circadian Clock in Mouse Embryonic Fibroblasts", Society for Research on Biological Rhythms Biennial Meeting, Sandestin, FL. 2008
- 2007 Poster Presentation, "DNA Damage Resets the Mammalian Circadian Clock," Department of Molecular and Cellular Biology Retreat, Dartmouth College. 2007
- 2004 Seminar, "LRBA and Carcinogenesis: Gene regulation, Structure, and Function," Department of Biochemistry Seminar Series, University of South Florida, Tampa, FL. 2004
- 2004 Seminar, "LRBA and Carcinogenesis: Gene regulation, Structure, and Function," Department of Biochemistry Seminar Series, University of South Florida, Tampa, FL. 2004

Poster Presentation, "Functional Regulation of the LPS-responsive Beige-like Anchor (LRBA) gene by p53 and E2F1," FASEB, San Diego.

Poster Presentation, "Functional Regulation of the LPS-responsive Beige-like Anchor (LRBA) gene by p53 and E2F1," University of South Florida Research Day, Tampa, FL, 2003

## **ACADEMIC LEADERSHIP**

2015 – present **Course Director, Directed Research, GMS7910, USF.** One of the requirements for graduation from the USF Master's Program in Molecular Medicine is participation in a mentored research project. The objective is to provide the student with hands-on experience in a cutting-edge research environment in preparation for a career in the life sciences. The directed research project introduces students to the process of developing a successful research project under the direction of a chosen mentor in their field of interest.

2015 - present **Course Director, Medical Sciences Independent Study, GMS6908, USF.** This course was developed to evaluate the 30-page paper and 1-hour talk based on the student's directed research project.

2015 – present **Course Director, Human Structure and Function, GMS 7940, USF.** The purpose of the course is to provide Master's of Science students in the College of Medicine with a fundamental understanding of biological and genetic principles basic to pathophysiological processes, and to incorporate the fundamental principles learned as they apply to medicine. As program director, I am responsible for designing the curriculum as well as the exams.

2014 – present **Co-Course Director, Medical Sciences Skills Development, USF.** This course focuses on review of basic science principles and the acquisition of learning skills to study the medical sciences in the first-year medical curriculum. This three-week course centers on a combination of didactic lectures, study skills assessment, and medical case studies.

#### **TEACHING AND MENTORSHIP**

## **TEACHING:**

- 2025 Lecturer, GMS6706.003S18 Basic Medical Neurosciences, USF
- 2025 Lecturer, BMS6641.001, Neurological Systems, USF
- 2024 Lecturer, GMS6706.003S18 Basic Medical Neurosciences, USF
- 2024 Lecturer, BMS6641.001, Neurological Systems, USF
- 2023 Lecturer, GMS7940, Human Structure and Function, USF
- 2023 Lecturer, Medical Sciences Skills Development, USF
- 2023 Lecturer, BMS6641.001, Neurological Systems, USF
- 2023 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF
- 2023 Lecturer, GMS6706.003S18 Basic Medical Neurosciences, USF
- 2022 Lecturer, GMS7940, Human Structure and Function, USF
- 2022 Lecturer, Medical Sciences Skills Development, USF
- 2022 Lecturer, BMS6641.001, Neurological Systems, USF
- 2022 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF
- 2022 Lecturer, GMS6706.003S18 Basic Medical Neurosciences, USF
- 2021 Lecturer, GMS7940, Human Structure and Function, USF
- 2021 Lecturer, Medical Sciences Skills Development, USF
- 2021 Lecturer, BMS6641.001, Neurological Systems, USF
- 2021 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF
- 2021 Lecturer, GMS6706.003S18 Basic Medical Neurosciences, USF
- 2020 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF
- 2020 Lecturer, BMS6641.001, Neurological Systems, USF
- 2020 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF
- 2020 Lecturer, GMS6706.003S18 Basic Medical Neurosciences, USF
- 2020 Lecturer, Medical Sciences Skills Development, USF
- 2020 Lecturer, GMS7940, Human Structure and Function, USF
- 2019 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF
- 2019 Lecturer, BMS6641.001, Neurological Systems, USF
- 2019 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF
- 2019 Lecturer, GMS6706.003S18 Basic Medical Neurosciences, USF
- 2019 Lecturer, Medical Sciences Skills Development, USF
- 2019 Lecturer, GMS7940, Human Structure and Function, USF
- 2018 Lecturer, BMS6641.001, Neurological Systems, USF
- 2018 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF
- 2018 Lecturer, GMS6706.003S18 Basic Medical Neurosciences, USF
- 2018 Lecturer, Medical Sciences Skills Development, USF
- 2018 Lecturer, GMS7940, Principles in Molecular Medicine, USF
- 2017 Lecturer, BMS6641.001, Neurological Systems, USF
- 2017 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF
- 2017 Lecturer, BMS6206.711, Medical Biochemistry, USF
- 2017 Lecturer, Medical Sciences Skills Development, USF
- 2017 Lecturer, GMS7940, Principles in Molecular Medicine, USF
- 2016 Lecturer, BMS6641.001, Neurological Systems, USF
- 2016 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF
- 2016 Lecturer, BMS6206.711, Medical Biochemistry, USF
- 2016 Lecturer, Medical Sciences Skills Development, USF
- 2016 Lecturer, GMS7940, Principles in Molecular Medicine, USF
- 2015 Lecturer, BMS6641.001, Neurological Systems, USF
- 2015 Lecturer, BMS6633.713, Cardiovascular/Pulmonary, USF

- 2015 Lecturer, BMS6206.711, Medical Biochemistry, USF
- 2015 Lecturer, Medical Sciences Skills Development, USF
- 2015 Lecturer, GMS7940, Principles in Molecular Medicine, USF
- 2015 Lecturer, GMS6004, Intro to Medical Sciences, USF
- 2014 Lecturer, Medical Sciences Skills Development, USF
- 2014 Lecturer, GMS6004, Intro to Medical Sciences, USF
- 2014 Lecturer, GMS6201, Basic Medical Biochemistry, USF
- 2014 Lecturer, GMS6201, Basic Medical Biochemistry, USF
- 2014 Educational Enrichment Coordinator for the Year 1 Medical Sciences Curriculum. USF
- 2014 Educational Enrichment Coordinator for the Year 1 Medical Sciences Curriculum, USF
- 2011 Lecturer, Genetics142/Bio79, Dartmouth College

#### **POSTDOCTORAL MENTORSHIP:**

2023 - present (Co-mentor) **Daniel Moreira-Silva, Ph.D**. Daniel is currently working on the impact of tauopathy on the circadian clock. His work specifically involves assessing behavioral deficits, such as sleep cycle disruptions, in various mouse models of tauopathy.

2022- present (Co-mentor) **Genesis D'aloisio, Ph.D**. Genesis was hired as part of our current R01 investigating the connection between circadian dysfunction and alcohol use disorder (AUD). Her work is primarily focused on the impact of maternal circadian desynchrony and fetal alcohol exposure on neonatal development.

## **GRADUATE PH.D. DISSERTATION AND THESIS COMMITTEES:**

| 2018 - 2023 | Dissertation Committee Member for Aya Elmarasafwi, Ph.D. student, Moffitt Cancer Biology |
|-------------|--|
| Program     |  |

2018 - 2022 Dissertation Committee Member for Amanda Pierce, Ph.D. student, USF Department of Chemistry

## **GRADUATE STUDENT MENTORSHIP:**

2022- present (Co-mentor) **Alex Leake**, USF Ph.D. student. Alex was admitted into the USF Ph.D. program in Biomedical sciences and I will serve as co-mentor for her dissertation work.

2021- 2022 (Co-mentor) **Alex Leake**, USF Master's student. Alex was a student in the Molecular Medicine concentration and I served as co-mentor for her thesis work.

2021- 2022 **Sophia Cintron**, USF Master's student. Sophia was a master's student who did her thesis work in my lab, which was focused on elucidating the role of the clock in regulating tau production

2015 – 2020 (Co-mentor) **Heather Mahoney**, USF Ph.D. student. Heather was a Ph.D. candidate in the Integrated Biomedical Sciences program here at USF. Although I was not her primary mentor, I mentored Heather with one of her projects focused on circadian rhythms and aging. Heather

presented this work numerous times at both the Society for Neuroscience and Society for Research on Biological Rhythms conferences. Additionally, she presented this work multiple times at the annual USF Health Research Day Symposium. Heather began a post-doctoral fellowship in a lab focused on circadian rhythm biology last winter.

- 2019 2020 **Bethany Carter**, USF Master's student. Bethany was a student in the Master's in Molecular Medicine concentration and performed her mentored research project in my lab. Her research aims were to investigate the influence of tau transcription and post-translational regulation by the molecular circadian clock. Bethany graduated this past summer and has since moved on to an academic research position while she considers applying to a Ph.D. program.
- 2017 2018 **Alisa Moiseeva**, USF Master's student. Alisa was a student in the Master's in Molecular Medicine program I currently direct. I mentored her directed research project focused on circadian rhythms and neurodegeneration. As required by the program, she also wrote a 30-page paper and gave a talk on her directed research project, which I evaluated. Alisa is currently working as a clinical laboratory technician.
- 2016 2017 **Jonathon Faulkner**, USF Master's student. John was a student in the Master's in Molecular Medicine program I currently direct. He performed his directed research in my lab and presented his work at the annual USF Health Research Day Symposium. As required by the program, he also wrote a 30-page paper and gave a talk on her directed research project, of which he both scored highly on. John was such an exceptional student I hired him as a lab technician where he currently works.
- 2016 2017 **Daniela Crespo**, USF Master's student. Daniela was a student in the Master's in Molecular Medicine program I currently direct. I was a co-mentor for her directed research. As required by the program, she also wrote a 30-page paper and gave a talk on her directed research project, which I evaluated.
- 2015 2016 **Bethany Martin**, USF Master's student. Bethany was a student in the Master's in Molecular Medicine program I currently direct. I was a co-mentor for her directed research which she presented at the annual USF Health Research Day Symposium. As required by the program, she also wrote a 30-page paper and gave a talk on her directed research project, which I evaluated. Bethany is now working in the biotech industry.
- 2015 2016 **Dan Pham**, USF Master's student. Dan was a student in the Master's in Molecular Medicine program I currently direct. He performed his directed research in my lab and presented his work at the annual USF Health Research Day Symposium. As required by the program, he also wrote a 30-page paper and gave a talk on her directed research project, of which he both scored highly on. Dan is now a medical student at Florida International University.
- 2015 2016 **Elizabeth Sullivan**, USF Master's student. Elizabeth was a student in the Master's in Molecular Medicine program I currently direct. She performed her directed research in my lab and presented her work at the annual USF Health Research Day Symposium. As required by the program, she also wrote a 30-page paper and gave a talk on her directed research project, of which she both scored highly on. Elizabeth is now a medical student at Auburn University.
- 2011 2012 **Alec Crowell**, Dartmouth Ph.D. student. Alec was a student I mentored as a postdoc at Dartmouth college. I trained Alec in numerous biochemical and molecular biological techniques.

- 2011 2012 **Yufei Chen**, Dartmouth Ph.D. student. Yufei was a student I mentored as a postdoc at Dartmouth college. I trained Yufei in numerous biochemical and molecular biological techniques.
- 2009 2010 **Arko Dasgupta**, Dartmouth Ph.D. student. Arko was a student I mentored as a postdoc at Dartmouth college. I trained Arko in numerous biochemical and molecular biological techniques.

## **UNDERGRADUATE STUDENT MENTORSHIP:**

- 2025 present **Stanley Huang**, USF Honors College Undergraduate. Stanley's project is focused on determining whether the circadian clock directly regulates the transcription in brain regions impacted by tauopathy in relevant rodent models.
- 2023 present **Yeejon (Josh) Sohn**, USF Undergraduate. Josh has been handling our extensive mouse colony, which includes designing improved genotyping methods for our more challenging lines.
- 2020-2022 **Lucas Douridas**, USF Undergraduate. Lucas' project is focused on determining whether the circadian clock directly regulates the transcription of MAPT by utilizing bioluminescence and protein chemistry.
- 2020-2021 **Nikhil Madina**, USF Honors Student. Nikhil is a 3<sup>rd</sup> year student who is doing his undergraduate honor's thesis work with me. His project is focused on determining whether the circadian clock directly regulates the transcription of MAPT through cellular assays.
- 2018 2020 **Camden Burns**, USF Undergraduate. Camden's work in my lab focused on cell culture experiments involving real time bioluminescence and plasmid transfections.
- 2018 2020 **Maya Ahmed**, USF Undergraduate. Maya was trained in cell culture and plasmid transfections.
- 2017 2018 **Clayton Wyatt**, USF Undergraduate. Clayton was trained in techniques such as cell culture, genotyping, and mouse husbandry.
- 2014 2016 **Amara Yunus**, USF undergraduate. Amara was an exceptional volunteer in the lab. She was initially trained in techniques such as cell culture, genotyping, and mouse husbandry. However, she was such an exceptional student, I hired her as our lab manager. Amara presented her work at 2 USF Research Day symposiums and is an author on a publication from my lab. Amara is now a first-year pharmacy student.
- 2014 2015 **Cameron McNeil**, USF undergraduate. Cameron was a volunteer in the lab who was trained in techniques such as cell culture, genotyping, and mouse husbandry. He now works in the biotech industry.
- 2013 2014 **Katherine Woo**, USF undergraduate. Katherine was an honors student who did her thesis on addiction and circadian rhythm biology. Katherine is now a second-year medical student at USF.
- 2013 2014 **Amaara Babwah**, USF undergraduate. Amaara was an exceptional volunteer in the lab that was initially trained in techniques such as cell culture, genotyping, and mouse husbandry. However, she went on to have an independent project of her own focused on. She is currently a 3<sup>rd</sup> year medical student.

2013 – 2014 **Ahmad Imam**, USF undergraduate. Ahmad was a volunteer in the lab trained in techniques such as cell culture, genotyping, and mouse husbandry.

2010 –2012 **Kyle Lenz**, Dartmouth undergraduate. Kyle was a Howard Hughes research fellowship student. He was trained in Genetics, Cell Culture, and Molecular Biological techniques and presented his work at two lab meeting sessions as well as at the annual Dartmouth undergraduate poster presentation.

Summer 2010 **Laura Bond**, SURF undergraduate. Mentored for the Summer Undergraduate Research Program (SURF). Laura was trained in Cell Culture, Genetics, and Molecular Biology techniques. She presented her data during a lab meeting, and at two poster sessions: SURF meeting (Woods Hole SURF Retreat) and at the Dartmouth SURF poster session. Laura is now a graduate student in the Integrated Program in Biochemistry at the University of Wisconsin-Madison and works in the Ntambi lab.

Summer 2009 **Adam Hill**, SURF undergraduate. Mentored for the Summer Undergraduate Research Program (SURF). Adam was trained in Cell Culture, Genetics, and Molecular Biology techniques. He presented his data during a lab meeting, and at two poster sessions: SURF meeting (Woods Hole SURF Retreat) and at the Dartmouth SURF poster session. Adam is now a graduate student in the Yale Neuroscience program.

## **TECHNICIAN SUPERVISION AND TRAINING:**

2020 – present **Hubert Nguyen**. Hubert is a former volunteer that was hired as a full time technician when Hannah Justin left our lab. Presently, he oversees our tissue culture experiments, including real time bioluminescence assays to monitor the circadian clock in live cells.

2019 – 2023 **David Gonzalez**. David is former volunteer that I hired this past year and is currently in charge of our mouse colony as well as our circadian behavioral experiments.

2019 – 2020 **Hannah Justin**. Hannah is a former volunteer that handled of our tissue culture experiments, including real time bioluminescence assays to monitor the circadian clock in live cells, as well as numerous molecular biological techniques.

2018 – 2019 **Samantha Reiss**. Sami is currently in charge of our tissue culture experiments, including real time bioluminescence assays to monitor the circadian clock in live cells, as well as numerous molecular biological techniques.

**John Faulkner**. John was hired to replace Amara as my lab manager and was trained in cell culture, genotyping, mouse husbandry and molecular biological techniques.

2016-2017 **Amara Yunis.** Amara was hired to replace Korey as my lab manager and was trained in cell culture, genotyping, mouse husbandry and molecular biological techniques. Amara earned two publication authorships during this time.

2014–2016 **Korey Stevanovich**. Korey was hired as my lab manager and was trained in cell culture, genotyping, mouse husbandry and molecular biological techniques. Korey earned two publication authorships during this time.

2007-2012 **Wei Wang**, technician. I trained Wei in techniques such as cell culture, genotyping, and mouse husbandry when I was a postdoc at Dartmouth.

Amy Costello, technician. I trained Amy in techniques such as cell culture and western blot when I was a graduate student at USF.

## OTHER ACTIVITIES AND ACADEMIC SERVICE

2024 - present Chair, Academic Integrity Committee, USF College of Medicine, Graduate Affairs

2024 - present Chair, USF Neuroscience Institute Special Seminar Series

2020 - 2023 Co-chair, USF Neuroscience Institute Seminar series.

2014 – present Ad Hoc Grant Application Reviewer: Alzheimer's Association, Medical Research Council (MRC), and Michael J Fox Foundation.

2008 - present Ad Hoc Journal Reviewer: *Scientific Reports, Journal of Clinical Investigation, Neurobiology of Disease, Neurobiology of Aging, International Journal of Biological Sciences, Journal of Biological Rhythms, Nucleic Acids Research, Molecular Cell Biology, Clinical and Translational Medicine, Cellular and Molecular Neurobiology, PeerJ, Frontiers of Neuroscience, Chronobiology International*, and *PLoS One*.

2008 - 2010 Officer and founding member of the Dartmouth College Postdoctoral Association

#### **HONORS AND AWARDS**

| 2010 | Research Excellence Award, Society for Research on Biological Rhythms Blennial |
|------|--|
|      | Meeting, Sandestin, FL   |
| 2008 | Research Excellence Award, Society for Research on Biological Rhythms Biennial |
|      | Meeting, Sandestin, FL.  |
| 2003 | Graduate Student Travel Award, FASEB, San Diego, CA                            |
| 2000 | Undergraduate Research Fellowship  |
|      |  |

#### REFERENCES

Furnished upon request.