

Summary of Experience

Academic Leadership

- 2021- present** **Senior Vice President for Research and Economic Development and Associate Provost, Nova Southeastern University, Ft. Lauderdale, FL**
- 2018-2021 Associate Vice President for Strategic Initiatives, Divisions of Academic Affairs and of Financial Affairs, Florida Atlantic University, Boca Raton, FL.
- 2018-2021 Head of Institutional Partnerships, Max Planck Florida Institute for Neuroscience, Jupiter, FL.
- 2018-2021 Director, FAU Max Planck Honors Program, Jupiter, FL.
- 2018 Associate Dean for Graduate Studies, Charles E. Schmidt College of Science, Florida Atlantic University (I was also acting AD w/signing authority from 2016-2018).
- 2016-2018 Associate Director, FAU Brain Institute, Florida Atlantic University, Boca Raton, FL.
- 2013-2016 Associate Director, Integrative Biology PhD Program, Florida Atlantic University, Boca Raton, FL.
- 2010-2013 Director, Honors Program, Biological Sciences, Florida Atlantic University, Boca Raton, FL.

Faculty/Affiliate Positions

2021-present

**Professor
Nova Southeastern University
College of Psychology
Dept. of Psychology and Neuroscience
Davie, FL**

2012-present

**Visiting Investigator
The UF/Scripps Research Institute,
Dept. of Metabolism and Aging (2012-2017),
Dept. of Neuroscience (2017-present),
Jupiter, FL 33458 USA**

2021-present
Visiting Scientist/ IMPRS faculty
Max Planck Florida Institute
Jupiter, FL.

2021-present
Affiliate Professor
Florida Atlantic University
Department of Biological Sciences
Boca Raton, FL

2020-2021
Professor, tenured
Florida Atlantic University
Department of Biological Sciences
Boca Raton, FL 33431 USA

2014-2020
Associate Professor, tenured
Florida Atlantic University
Department of Biological Sciences
Boca Raton, FL 33431 USA

2008-2014
Assistant Professor, tenure track
Florida Atlantic University
Department of Biological Sciences
Jupiter, FL 33458 USA

Industry Positions

2015-2019 Founder/Chief Scientific Officer
Neuro Pharmacologies Inc, FAU Tech Runway,
Boca Raton FL

2013-2016 Founder/Chief Scientific Officer
Eco Neurologics LLC, FAU Research Park,
Boca Raton FL

2003-2004 Scientific Imaging Consultant
Olympus Canada, Toronto, Ontario.

Education

Heart and Stroke Post-Doctoral Fellow
Department of Biology
Completed 2008

	University of Toronto	
Ph.D.	University of Toronto Department of Physiology, College of Medicine	Completed 2003
M.Sc.	Queen's University Department of Biology	Completed 1998
B.Sc. (Hon.)	Queen's University Department of Biology	Completed 1996

Scholarship/Research/Creative Activity

Summary of Research Area

Adapted animals, such as insects, employ genetic, molecular, and physiological strategies to prevent specific neurological pathologies resulting from stressors such as low oxygen (anoxia), high temperatures (hyperthermia), and high levels of free radicals (oxidative stress). My research program is poised to take advantage of this through the use of a genetically tractable model systems including the fruit fly *Drosophila melanogaster* and the nematode worm *C. elegans*. Our goal is to develop novel methods for maintaining both neural function and survival during such instances.

Patents

Dawson-Scully, K; Stille, S; Lepore, S; Maki, S.L. (2022) BRIDGED BICYCLIC COMPOUNDS AND THEIR DERIVATIVES AS ANTIEPILEPTIC AGENTS AND METHODS OF USE THEREOF. **Provisional** August *United States Patent Office*, Serial number 63/399,312

Dawson-Scully, K.; Lepore, S. D.; St. Germain, E. J., **Bollinger, W.;** Maki, S. L. **Sial, N.** (2020) BRIDGED BICYCLIC COMPOUNDS AND THEIR DERIVATIVES AS NEUROPROTECTIVE AGENTS AND METHODS OF USE THEREOF. **Granted** July 2020 *United States Patent Office*, Serial number US10759735B2

Dawson-Scully K, Armstrong GAB, Robertson RM., Sokolowski MB (2011). COMPOSITIONS AND METHODS FOR TREATING NEURAL ANOXIA AND SPREADING DEPRESSION **Granted** Sept. 27th, 2011. *United States Patent Office*, Serial number US 8,026,217.

Dawson-Scully K, Armstrong GAB, Kent C, Robertson RM., Sokolowski MB (2005). THERMOPROTECTIVE COMPOSITIONS OF PKG PATHWAY INHIBITORS AND METHOD OF USE THEREOF. **Granted** Dec 28th, 2010. *United States Patent Office*. Serial number US 7,858,579, B2.

Refereed Journal Publications (my laboratory underlined)

Simonson A, Naraine A, Maki S, Nugent K, Lepore S, Dawson-Scully K. 2024 Resveratrol natural product inspired compound as a potent neuroprotectant against acute oxidative stress. *MicroPubl Biol.* 2024 Sep 3;2024:10.17912/micropub.biology.001127. doi: 0.17912/micropub.biology.001127.

Stilley SE, Naraine AS, Yadavalli KP, Maki SL, Jutte EM, Kahn JM, Surtel AA, Lepore SD, Dawson-Scully K. 2023 Bridged bicyclic compounds: Comprehending a novel compound class as potential anti-seizure agents. *Epilepsia.* Nov;64(11):2958-2967

Suthakaran N, Brock T, Naraine A, Gonzalez-Lerma P, Hopkins C, Dawson-Scully K. 2022 Atropine reduces aldicarb-induced sensitivity to *C. elegans* electroshock model. *MicroPubl Biol.* 2022 Aug 8;2022:10.17912/micropub.biology.000621. doi: 10.17912/micropub.biology.000621. *eCollection* 2022.

Naraine AS, Aker R, Sweeney I, Kalvey M, Surtel A, Shanbhag V, Dawson-Scully K. 2022 Roundup and glyphosate's impact on GABA to elicit extended proconvulsant behavior in *Caenorhabditis elegans*. *Sci Rep.* 2022 Aug 23;12(1):13655. doi: 10.1038/s41598-022-17537-w.

Andrew RD, Hartings JA, Ayata C, Brennan KC, Dawson-Scully KD, Farkas E, Herreras O, Kirov SA, Müller M, Ollen-Bittle N, Reiffurth C, Revah O, Robertson RM, Shuttleworth CW, Ullah G, Dreier JP. 2022 The Critical Role of Spreading Depolarizations in Early Brain Injury: Consensus and Contention. *Neurocrit Care.* 2022 Jun;37(Suppl 1):83-101.

Andrew RD, Farkas E, Hartings JA, Brennan KC, Herreras O, Müller M, Kirov SA, Ayata C, Ollen-Bittle N, Reiffurth C, Revah O, Robertson RM, Dawson-Scully KD, Ullah G, Dreier JP. 2022 Questioning Glutamate Excitotoxicity in Acute Brain Damage: The Importance of Spreading Depolarization. *Neurocrit Care.* 2022 Jun;37(Suppl 1):11-30.

Suthakaran N, Wiggins J, Giles A, Opperman KJ, Grill B, Dawson-Scully K. 2021 O-GlcNAc transferase OGT-1 and the ubiquitin ligase EEL-1 modulate seizure susceptibility in *C. elegans*. *PLoS One.* 2021 Nov 19;16(11)

Krill JL, Dawson-Scully K. 2021 Characterization of a novel stimulus-induced glial calcium wave in *Drosophila* larval peripheral segmental nerves and its role in PKG-modulated thermoprotection. *J Neurogenet.* Sep;35(3):221-235.

Robertson RM, Dawson-Scully KD, Andrew RD. 2020 Neural shutdown under stress: an evolutionary perspective on spreading depolarization. *J Neurophysiol.* Mar 1;123(3):885-895. doi: 10.1152

Mahneva O, Risley MG, John C, Milton SL, Dawson-Scully K, Ja WW. 2020 *In vivo* expression of peptidylarginine deiminase in *Drosophila melanogaster*. *PLoS ONE* Jan 15;15(1):e0227822. doi: 10.1371/journal.pone.0227822.

Mahneva O, Caplan SL, Ivko P, Dawson-Scully K, Milton SL. 2019 NO/cGMP/PKG activation protects *Drosophila* cells subjected to hypoxic stress. *Comp Biochem Physiol C*, May 28. pii: S1532-0456(19)30186-3

Kelly S, Dawson-Scully K. 2019 Natural polymorphism in protein kinase G modulates functional senescence in *Drosophila melanogaster*. *J Exp Biol*. Apr 9;222(Pt 7). pii: jeb199364. doi: 10.1242/jeb.199364.

Bollinger WL, St Germain EJ, Maki SL, Sial NK, Lepore SD, Dawson-Scully K. 2019 Resveratrol-Inspired Bridged Bicyclic Compounds: A New Compound Class for the Protection of Synaptic Function from Acute Oxidative Stress. *ACS Chem Neurosci*. Jan 6. doi: 10.1021/acchemneuro.8b00577.

Bollinger WL, Sial N, Dawson-Scully K. 2018 BK channels and a cGMP-dependent protein kinase (PKG) function through independent mechanisms to regulate the tolerance of synaptic transmission to acute oxidative stress at the *Drosophila* larval neuromuscular junction. *J Neurogenet*. Sep;32(3):246-255.

Risley MG, Kelly SP, Minnerly J, Jia K, Dawson-Scully K. 2018 egl-4 modulates electroconvulsive seizure duration in *C. elegans*. *Invert Neurosci*. May 30;18(2):8.

Kelly SP, Risley MG, Miranda LE, Dawson-Scully K. 2018 Contribution of a natural polymorphism in protein kinase G modulates electroconvulsive seizure recovery in *Drosophila melanogaster*. *J Exp Biol*. 2018 Jul 18;221(Pt 14)

Opperman K, Mulcahy B, Giles A, Risley M, Bimbaum R, Tulgren E, Dawson-Scully K, Zhen M, Grill B, 2017 The HECT family ubiquitin ligase EEL-1 regulates neuronal function and development. *Cell Reports*. CELL-REPORTS-D-17-00602R1

Risley M, Kelly S, Dawson-Scully K, 2017 Electroschock Induced Seizures in Adult *C.elegans*. *Bio-Protocol*.

Murphy KR, Deshpande SA, Yurgel ME, Quinn JP, Weissbach JL, Keene AC, Dawson-Scully K, Huber R, Tomchik SM, Ja WW., 2016 Postprandial sleep mechanics in *Drosophila*. *Elife*. Nov 22;5. pii: e19334.

Krill JL, Dawson-Scully K., 2016 cGMP-Dependent Protein Kinase Inhibition Extends the Upper Temperature Limit of Stimulus-Evoked Calcium Responses in Motoneuronal Boutons of *Drosophila melanogaster* Larvae. *PLoS ONE*. Oct 6;11(10):e0164114.

Risley MG, Kelly SP, Jia K, Grill B, Dawson-Scully K., 2016 Modulating Behavior in *C. elegans* Using Electroschock and Antiepileptic Drugs. *PLoS ONE*, Sep 26;11(9):e0163786.

Caplan SL, Zheng B, Dawson-Scully K, White CA, West LM., 2016 Pseudopterosin A: Protection of Synaptic Function and Potential as a Neuromodulatory Agent. *Mar Drugs*. Mar 10;14(3).

Benasayag-Meszaros R, Risley MG, Hernandez P, Fendrich M, Dawson-Scully K., 2015 Pushing the limit: examining factors that affect anoxia tolerance in a single genotype of adult *D. melanogaster*. *Nature: Sci Rep* Mar 17; 5:9204.

Wang R, Palavicini JP, Wang H, Maiti P, Bianchi E, Xu S, Lloyd BN, Dawson-Scully K, Kang DE, Lakshmana MK, 2014 RanBP9 Overexpression Accelerates Loss of Dendritic Spines in a Mouse Model of Alzheimer's Disease. *Neurobiol Dis.* 2014 Sep;69:169-79.

Palavicini JP, Lloyd BN, Hayes CD, Bianchi EB, Kang DE, Dawson-Scully K, Lakshmana MK, 2013 RanBP9 plays a critical role in neonatal brain development in mice. *PLoS ONE* 8(6), e66908.

Milton SL, Dawson-Scully K, 2013 (Peer Reviewed Review). Alleviating brain stress: what alternative animal models have revealed about therapeutic targets for hypoxia and anoxia. 8 (3), 287-301, *Future Neurology*

Caplan, SL, Milton, SL., Dawson-Scully K, 2013. cGMP-dependent protein kinase G (PKG) activity controls synaptic transmission tolerance during acute oxidative stress 109(3):649-58, *J. Neurophys.*

Ayyanathan, K, Kesaraju, S, Dawson-Scully, K, and Weissbach, H, 2012. Combination of Sulindac and Dichloroacetate Kills Cancer Cells via Oxidative Damage. *PLoS ONE* 7(7): e39949.

Armstrong GA, Xiao C, Krill, J, Dawson-Scully K and Robertson RM, 2011. Glial hsp70 protects K⁺ homeostasis during anoxia-induced spreading depression in the *Drosophila* brain. *PLoS ONE* 6(12): e28994.

Chen, A., Kramer, E., Krill, J., Purpura, L., Zars, T., Dawson-Scully, K., 2011, Influence of natural variation at the foraging gene on thermotolerance in adult *Drosophila* in a narrow temperature range. *J. Comp. Physiol. A* 197(12):1113-8.

Dawson-Scully K, Bukvic D, Chakaborty-Chatterjee M, Ferreira R, Milton SL, and Sokolowski MB 2010. Controlling anoxic tolerance in adult *Drosophila* via the cGMP-PKG pathway. *J Exp Biol.* Jul 15;213(Pt 14):2410-6.

Armstrong GA, López-Guerrero JJ, Dawson-Scully K, Peña F, Robertson RM. 2010, Inhibition of protein kinase G activity protects neonatal mouse respiratory network from hyperthermic and hypoxic stress. *Brain Res* 1311:64-72.

Dawson-Scully K, Armstrong GAB, Kent C, Robertson RM, and Sokolowski MB, 2007. Natural variation in the thermotolerance of neural function and behavior due to a cGMP dependent protein kinase. *PLoS ONE* 2(8): e773.

Dawson-Scully K, Lin YQ, Imad M, Marin L, Zhang J, Horne JA, Meinertzhagen IA, Karunanithi S, Zinsmaier KE, and Atwood HL. 2007 Morphological and functional effects of altered Cysteine String Protein at the *Drosophila* larval neuromuscular junction *Synapse* Oct; 61(1):1-16. [Cover Art].

Douglas S, Dawson-Scully K, and Sokolowski MB. 2005 (Peer Review Review). The neurogenetics and evolution of food-related behaviour. *Trends Neurosci.* Dec; 28(12):644-52.

Bronk P, Nie ZP, Klose MK, Dawson-Scully K, Zhang JH, Robertson RM, Atwood HL, and Zinsmaier KE. 2005. The multiple functions of Cysteine-string protein analyzed at *Drosophila* nerve terminals. *J Neurosci.* 25(9): 2204-2214.

Song W, Ranjan R, Dawson-Scully K, Bronk P, Marin L, Seroude L, Lin YJ, Nie ZP, Atwood HL, Benzer S, and Zinsmaier KE 2002. Presynaptic regulation of neurotransmission in *Drosophila* by the G protein-coupled receptor Methuselah *Neuron* 36(1): 105-119.

Bronk P, Wenniger JJ, Dawson-Scully K, Guo XF, Hong S, Atwood HL, and Zinsmaier KE 2001. *Drosophila* Hsc70-4 is critical for neurotransmitter exocytosis in vivo. *Neuron* 30(2): 475-488.

Dawson-Scully K, Bronk P, Atwood HL, and Zinsmaier KE 2000. Cysteine-string protein increases the calcium sensitivity of neurotransmitter exocytosis in *Drosophila*. *J Neurosci.* 20(16): 6039-6047.

Dawson-Scully K, and Robertson RM. 1998. Heat shock protects synaptic transmission in flight motor circuitry of locusts. *NeuroReport* 9(11): 2589-2593.

Dawson JW, Dawson-Scully K, Robert D, and Robertson RM. 1997. Forewing asymmetries during auditory avoidance in flying locusts. *J. Exp. Biol.* 200(17): 2323-2335. [Cover Art]

Robertson RM, Xu H, Shoemaker KL, and Dawson-Scully K. 1996. Exposure to heat shock affects thermosensitivity of the locust flight system. *J. Neurobiol.* 29(3): 367-383.

Books

Dawson-Scully K., et al. 2015 Neurophysiology (Lab Manual), 102 pages, Dept. of Biological Sciences, FAU Boca Raton, FL – 2nd edition distributed 2017

Dawson-Scully K, Roy A. 2004. Medical Alert, 47 pages, Bold Print (Learning Through Literacy), *Harcourt Publishing*, Toronto, Ontario - ISBN: 1897096518 [Secondary School Publication]

Research Grants Received

NIH R15 GM110651-03

Synthesis of a Bridged Bicyclic Natural Product Using Allenyl Esters (2020-2025)

Total Award Value: **\$448,000 (Direct \$298,000)**

co-PI (PI: Salvatore Lepore)

NSF 1829243

Type I - Florida Atlantic University National Science Foundation I-Corps Site

Advancing Entrepreneurship and Innovation (2019-2021)

Total Award Value: **\$254,000 (Direct \$179,000)**

PI: Dawson-Scully

NSF 1829243

Type I - Florida Atlantic University National Science Foundation I-Corps Site
COVID-19 Supplement: Advancing Entrepreneurship and Innovation (2020-2021)
Total Award Value: **\$44,231**
PI: Dawson-Scully

Max Planck Florida Institute for Neuroscience

Postdoctoral Supplement: Characterizing the Molecular Mechanisms for Neuroprotection in *D.melanogaster* and *C.elegans*.
Administrative Grant (non-competitive)
Total Award Value: **\$359,703 (2020-2025; deferred 2021)**
PI: Dawson-Scully

Max Planck Florida Institute for Neuroscience

Characterizing the Molecular Mechanisms for Neuroprotection in *D.melanogaster* and *C.elegans*.
Administrative Grant (non-competitive)
Total Award Value: **\$625,000 (2018-2023; deferred 2021)**
PI: Dawson-Scully

Ariel University and FAU Division of Research

Use of increased HSP expression to reduce seizure activity in *C. elegans*. (2019-2021)
Total Award Value: \$30,000 (50% to D-S, 50% to Sherman)
PIs: Ken Dawson-Scully and Michael Sherman (Ariel)

NIH R15 GM110651-02

Synthesis of a Bridged Bicyclic Natural Product Using Allenyl Esters (2017-2020)
Total Award Value: **\$450,000 (Direct \$300,000)**
co-PI (PI: Salvatore Lepore)

Pfizer WI225058: Compound Transfer Program Grant (CTP) (2017-2019)

Establishing a role for Viagra® as an antiepileptic drug using two invertebrate model systems
PI: Dawson-Scully

Aker Foundation: Medical Scholars Foundation Grant for Post-Bac N. Sial. (2017-2019)

Total Award Value: **\$10,000**
PI: Dawson-Scully

FAU Brain Institute Seed Grant: Synthesis of a Bridged Bicyclic Natural Product Using Allenyl Esters (2018-2019)

Total Award Value: **\$15,000**
PI: Dawson-Scully (Co-PI Lepore)

FAU Brain Institute

Administrative Brain Institute (non-competitive) (2016-2017)
Total: \$30,000... \$20k/yr (1.5yrs)

PI Dawson-Scully

Eco Neurologics Inc., Neuroprotection via the PKG Pathway (2013-2018)

\$353,000 (Direct \$353,000)

Lead Investigator: Ken Dawson-Scully

Service Contributions (since 2010)

University level

- NSU Executive Committee 2022-present
- NSU President's Council 2021-present
- NSU Dean's Council, Provost 2021- present
- NSU Faculty Research Advisory Council 2021- present
- NSU Assoc. Dean Research Committee 2021- present
- NSU Academic New Program Committee 2022- present
- FAU Circle of Chairs and Directors, Provost, 2020-2021
- FAU Task force for bringing laboratories to remote learning, Provost, 2020-2021 (Chair)
- FAU Provost Advisory Committee, Provost, 2019-2021
- FAU Jupiter Campus Life Science Initiative Budget Committee, Provost, 2019-2021
- FAU Jupiter Campus Advisory/Coordination Council, President FAU, 2018-2021
- Research Core Oversight Committee, Division of Research FAU, 2017-2021
- National Merit Scholar Recruitment, Provost, 2018-2021
- FAU Max Planck Program Committee (Chair 2018-2021)
- FAU Max Planck Admissions Committee (Chair 2018-2021)
- NSF LEARN Advisory Board, FAU, 2015-2021

External

- Palm Beach BDB, Economic Development Committee, 2021-present
- Palm Beach North Chamber Education Committee, 2021-present
- County Life Science Advisory Board, Palm Beach, FL, 2018-present (2021 NSU rep)
- Senior Management Team, Max Planck Florida, 2018-2021
- Max Planck COVID Crisis Committee, 2020-2021
- Education Team, Max Planck Florida, 2018-2021
- International Max Planck Research School (IMBRS) for Brain and Behavior Steering Committee, Selection Committee,
- Teaching Committee, Max Planck, Bonn Germany, 2015-2021
- Legislative Committee, BioFlorida FAU representative, 2012-present
- Max Planck Institutional Biosafety Committee (IBC), MPFIN, 2013-present
- Scripps NSF REU Advisory Board, TSRI, 2013-present
- adhoc Tenure and Promotion U Saskatoon, CANADA (year withheld)
- Business Growth Committee, BioFlorida FAU representative, 2012-2018
- Neuroscience Exchange Program, Max Planck, Gottingen Germany, 2011-2015

College level (Charles E. Schmidt College of Science, FAU)

- Graduate College Dean Advisory Committee, 2019-2021
- Promotion and Tenure Committee, College of Medicine (2018-2021)
- Associate Dean Search Committee, College of Science (CoS), 2018 (Chair)
- College of Science Executive Committee, CoS, 2017-2018
- College of Science Frontiers Speaker Committee, 2016-2020
- Undergraduate Appeals Committee, CoS, 2017
- M.Sc. Marine Science Degree Planning Committee, CoS, 2017-2019
- Graduate College 3MT Steering Committee, FAU, 2016-2020
- College of Science Honors Committee, FAU, 2015-2018
- College Graduate Program Committee, FAU 2014-2019 (Chair 2016-2019)
- Center for Biotechnology Advisory Board (CMBB), FAU, 2013-2018
- College Research Resource Committee, CoS, FAU 2010-2017
- College of Science Disciplinary Appeals Committee, FAU 2016
- Strategic Planning (Goal #1) Undergrad. Education, CoS, FAU 2012
- Undergraduate Neuroscience Curriculum Committee, CoS, FAU, 2010-2011
- Brain Damage and Repair Steering Committee, CoS, FAU 2010
- Undergraduate Academic Steering Committee, CoS, FAU 2010-2011

Department level (Biological Sciences, FAU)

- Budget Committee, Biological Sciences, FAU, 2019-2021
- Admissions Committee: Integrative Biology (IB) PhD, FAU, 2013-2021 (Chair 2013-2016)
- Program Committee: Integrative Biology Neuroscience (IBNS) PhD, 2013-2021
- Premedical BS Committee, Biological Sci, FAU, 2018-2020
- Admissions Committees Biological Sciences MS Program, 2013-2017
- Program Committees (3): IB, IBES, MS Programs, FAU, 2013-2017 (Chair IB 2013-2016)
- Environmental Science Program Committee 2016-2017
- Personnel Committee, Biological Sciences, FAU, 2014-2017
- Integrative Biology PhD Retreat Committee, FAU, 2013-2016

Reviewer

Editorships and Editorial Boards

Review Editor: Frontiers in Genomic Physiology, 2012-2013

Book Reviews

Neuroscience Textbook (name withheld), Garland Science, Taylor & Francis Group, 2016

Journals

American Chemical Society, Neuroscience
American Journal of Physiology-Regulatory, Integrative and Comparative Physiology
Comparative Biochemistry and Physiology
Communicative & Integrative Biology
eNeuro
eLife

Frontiers in Bioscience “Molecular pathways of aging and longevity”
Fly
Genes, Brain and Behavior
Integrative and Comparative Biology
International Journal of Development Neuroscience
Journal of Comparative Physiology A
Journal of Insect Behavior
Journal of Insect Physiology
Journal of Neurogenetics
Journal of Neurophysiology
Journal of Neuroscience
Journal of Neuroscience Methods
Journal of Visual Experimentation
Neuroscience
PLoS ONE
Pharmacology, Biochemistry and Behavior
Psychopharmacology
Reproductive Toxicology
Royal Society Open Science

Funding Agencies

National Institutes of Health (**NIH**), NCATS Study Section, 2022, 2023, 2024
Natural Science and Engineering Research Council of Canada **NSERC**, 2014-2017, 2020
National Aeronautics and Space Administration **NASA**, 2013-2015, 2022
National Institutes of Health (**NIH**), CSR Study Section, Synapses, Cytoskeleton and Trafficking, 2020
Biotechnology and Biological Sciences Research Council (**BBSRC**), UK, 2019
Medical Research Council (**MRC**), UK, 2020
College of Medicine Biomedical Seed Grants, FAU, 2018
FAU Brain Institute Seed Grants, 2017
i-Heal FAU Internal Seed Grants, 2017
Puerto Rico Science Trust Grants, Puerto Rico, 2016
FONDECYT, Chile, Research Grants, 2016

Other Relevant Activities

Fellow	Royal Entomological Society 2023- present National Academy of Inventors 2024- present
Member	Society for Neuroscience 1998- present American Physiological Society 2018- present Council of Colleges of Arts & Sciences 2018- present
Organizer	Protein Kinase G Integrative Symposium, University of Toronto, Toronto, <u>Canada</u> (2013), 35+ attendees

3 Exhibits at Tiger Woods Foundation, STEM Honors Conference (2014)

Co-Organizer South Florida Drosophila Research Consortium Meeting, Florida Atlantic University (2009, 2012, 2015), 60+ attendees

Community/Guest Non-Research Lectures

2022 Keynote: NSU Honors College – The keys to mentorship
2020 Keynote: FAU Division of Research Speaker for Postdoctoral Fellows
2020 Career Panelist, Max Planck Outreach, Jupiter FL
2019 American Heritage Science Complex Opening Speaker, Delray FL
2018 Keynote: FAU Division of Research Speaker for Postdoctoral Fellows
2018 CoS panel Meeting of the Minds, FAU Student Organization
2018 Welcome Speaker, CGPSA, FAU
2018 BioFlorida Jupiter Life Science Outreach Speaker
2017-2019 National Merit Recruitment American Heritage School
2017 FAU High School Speaker: Drug Discover Techniques
2016 FAU Tech Runway Business Competition Pitch – Winner: Neuroscience Designee
2015 Association of Biology and Biotechnology in Science, FAU, Boca Raton FL
2015 Public Seminar to the Palm Beach Business Group: What’s Happening at FAU in Jupiter and Why Flies Like Viagra Too. Jupiter, FL.
2014 FAU Foundation Board, Jupiter, FL
2014 Angel Forum, Jupiter, FL
2013 Waterford Community Center, Jupiter, FL
2013 Academic Leadership Symposium, Scripps Research Institute, FL
2012 Choosing Academia over Industry, Scripps Research Institute, FL
2011 Protecting the effects of Stroke through the use of the fruit fly, Boca Raton Rotary Club.
2011 Protecting the effects of Stroke through the use of the fruit fly, The Boca Thinkers Club, Boca Raton FL.
2008-2012 Introduction to research in the Dawson-Scully lab, Biomedical Freshmen, FAU.
2008-2012 Introduction to research in the Dawson-Scully lab, Premedical Students, FAU.
2010 CMBB last minute class filler: Anoxia research and Drosophila, FAU.
2010 Cellular Neuroscience and Disease: 1 week of basic neurophysiology lectures, FAU.

Mentoring and Training (bold = current)

Post-docs, visiting Fellows, post Bacs

Scarlet Park	(Fall 2023 – present; postdoc lab head)
Anant Jain	(Fall 2019 – Fall 2021; postdoctoral fellow)
Shweta Singh	(Fall 2016 – Fall 2018; postdoctoral fellow)
Nadia Sial	(Fall 2017 – Spring 2020; post-bac)
Stacey Lee Caplan	(Dec 2015 - Spring 2017; postdoctoral fellow)

Chair for Ph.D. Students

Paul Scarpinato	(Fall 2019- present)	IB PhD Student
Samantha Stilley	(Fall 2020 – Spring 2023)	IBNS PhD Graduated
Paola Gonzalez	(Fall 2020 – Fall 2024)	IBBS PhD Graduated
Nirthieca Suthakaran	(Spring 2019 – Fall 2022)	IB PhD Graduated
Akshay Naraine	(Fall 2018 – Spring 2023)	IBNS PhD Graduated
Ciny John	(Fall 2014 – Summer 2019)	IB Student Graduated
Rachel St. Clair	(Fall 2018-Spring 2019)	Rotation
Wesley Bollinger	(Fall 2016 – Summer 2018)	IBNS Graduated
Stephanie Kelly	(Fall 2014 – Spring 2019)	IB Graduated
Monica Risley	(Fall 2012 - 2018)	IBNS/IMPRS Graduated
Keith Murphy	(Fall 2012 - 2018)	IBNS Graduated
Olena Maknyeva	(Fall 2010 – 2018)	IB Graduated
Jennifer Krill	(Spring 2009 - 2018)	IB Graduated
Shweta Singh	(Spring 2012 - Fall 2016)	IB Graduated
Camilo Yepes	(Fall 2015)	Rotation
Stacey Caplan	(Spring 2009 – Summer 2015)	IB Graduated
Catherine Trivigno	(Spring 2009 – Fall 2011)	IB Graduated
Lauren Purpura	(Fall 2008-Spring 2010)	IB Transferred to W.Shen lab

Chair for M.Sc. Students

Nicole Jimenez	(Fall 2020 – Spring 2022)	Biological Sciences non-thesis)
Christina Sanchez	(Fall 2020 – Spring 2022)	Biological Sciences Thesis
Yasmine Zerrouki	(Fall 2020 – Spring 2022)	Biological Sciences
Alec Simonson	(Fall 2019 – Spring 2021)	Biological Sciences Thesis
Julieta Di Mase	(Fall 2015-Spring 2018)	Transferred to Guthrie lab
Shannon Dougherty	(Fall 2015-Fall 2018)	Graduated/Non-Thesis
Kent Fairchild	(Spring 2013 – Summer 2016)	Graduated/Non-Thesis
Tanya Kelley	(Fall 2013 – Fall 2015)	Thesis Chemistry Dept.
Raquel Benasayag	(Fall 2011 – Spring 2013)	Graduated/Thesis
Richard Barrett	(Fall 2012 – Spring 2013)	Graduated/Non-Thesis
Zachary Anderson	(Fall 2012 – Spring 2013)	Graduated/Non-Thesis

Undergraduate Students in Lab

Carina Pavlov	(Fall 2022-present)	NSF U-RISE
Jeremy Ignatio	(Fall 2012-present)	Psychology and Neuroscience
Emma Hickey	(Fall 2018-Spring 2021)	Psychology and Neuroscience
Andrew Simonson	(Fall 2020-Spring 2022)	Max Planck Honors Program
Isis Sweeny	(Fall 2018-Spring 2021)	Biological Sciences
Jonathon Wiggins	(Fall 2018-Spring 2021)	Biological Sciences

Madison Caldwell	(Spring 2019-Fall 2020)	Biological Sciences
Yasmine Zerrouki	(Fall 2018-Fall 2020)	Biological Sciences
Natasha Ramnauth	(Fall 2018-Fall 2020)	Biological Sciences
Alec Simonson	(Fall 2018-Spring 2019)	Max Planck Honors Program
Yichen (Ruby) Huang	(Fall 2017-Spring 2018)	NSF Learn
Zacharia John	(Fall 2018-Fall 2020)	Biological Sciences
Taylor Selman	(Fall 2016-Spring 2020)	RESEARCH Honors Program
Samantha Berner	(Fall 2016-Spring 2019)	RESEARCH Honors Program
Justin Xie	(Fall 2018-Spring 2022)	Max Planck Honors Program
Amanda Devoto	(Fall 2017-Spring 2019)	Biological Sciences
Leonor Matilda	(Summer 2016-Spring 2017)	THESIS Honors Biology
Claudia Tinoco	(Summer 2015-Summer 2016)	Biological Sciences
Leslie Cutting	(Fall 2015-Spring 2016)	Biological Sciences
Jonathon Kovacks	(Fall 2015-Spring 2016)	Biological Sciences
Mckenzie Merritt	(Fall 2012-Spring 2016)	THESIS Honors College Thesis
Camilo Yepes	(Spring 2015-Fall 2015)	Biological Sciences
Rafaela De Negri	(Fall 2013-Spring 2015)	University of Kentucky (DVM)
Stephanie Kelly	(Summer 2013-Summer 2014)	Psychology
Natalie Builes	(Spring 2013-Fall 2013)	THESIS Honors College
Kent Fairchild	(Summer 2013-Spring 2013)	Biological Sciences
Priscilla Hernandez	(Fall 2011-present)	Honors Biological Sciences
Jennifer Weissbach	(Spring 2013-present)	Dartmouth/Scripps SURF
Colin Leach	(Spring 2012- Summer 2012)	USF
Matthew Lovelace	(Spring 2011-Fall 2011)	Biological Sciences
Adam Chen	(Fall 2010-Summer 2011)	THESIS Honors Biology
Rachel Leeman	(Summer 2011)	UF
Arleen Apotella	(Fall 2010-Spring 2011)	Honors Biological Sciences
Raquel Benasayag	(Summer 2010-Fall 2011)	Penn State
Sohail Karram	(Fall 2009-Spring 2010)	Biological Sciences
Marianna Borges	(Fall 2009-Spring 2010)	Biological Sciences
Bonnie Edwards	(Fall 2009-Spring 2010)	Biological Sciences
Guilhermie Favero	(Fall 2009-Fall 2010)	Biological Sciences

High School Students in Lab

Mary Elizabeth Gabrielle	(Summer 2019)	Pine Crest
Isaac Lifert	(Summer 2019)	Pine Crest
David Baldwin	(Summer 2017 & 2018 & 2019)	Broward
Navan Parthasarathy	(Summer 2019)	American Heritage
JD Baldwin	(Summer 2015 & 2016)	Broward
Matthew Dardet	(Fall 2015-Spring 2016)	Pine Crest, Ft. Laud, FL
Charlotte Barock	(Summer 2015)	Benjamin, Jupiter
Madison Schmidt	(Summer 2015)	Sun Coast, FL
Samantha Stille	(Summer 2014)	Benjamin, Jupiter
Anastasia Hediger	(Summer 2011, 2012)	Pine Crest, Ft.Laud
Mo Markowitz	(Summer 2012, 2014)	Donna Estridge, Boca
Sofia Karabas	(Summer 2011)	Sun Coast, FL
Kailine Lambert	(Summer 2010)	Atlantic HS, FL