CURRICULUM VITAE

Alfredo Ghezzi, Ph.D.
Department of Biology, University of Puerto Rico, Rio Piedras
17 Ave. Universidad, Ste. 1701; San Juan, PR 00925

EDUCATION

May 2006	**Ph.D.** – Cell and Molecular Biology. The University of Texas at Austin, Austin, TX.
August 2000	**B.S.** – Molecular Biology. The University of Texas at Austin, Austin, TX.
August 2000	**B.S.** – Botany. University of Texas at Austin, Austin, TX.
August 2000	**B.S.** – Zoology. University of Texas at Austin, Austin, TX.

POSITIONS AND EMPLOYMENT

2021 – present	**Coordinator, Graduate Program in Biology** – Department of Biology, University of Puerto Rico, Rio Piedras.
2020 – present	**Associate Professor** – Department of Biology, University of Puerto Rico, Rio Piedras.
2016 – 2020	**Assistant Professor** – Department of Biology, University of Puerto Rico, Rio Piedras.
2012 – 2016	**Research Associate** – Department of Neuroscience and Waggoner Center for Alcohol and Addiction Research, The University of Texas at Austin.
2007 – 2012	**Postdoctoral Fellow** – Epigenetics of alcohol-neuroadaptation. Section of Neurobiology, University of Texas at Austin.
2006 – 2007	**Postdoctoral Fellow** – Neural plasticity of antennal lobe circuits in Drosophila. Department of Biology, Brandeis University.

TEACHING AND MENTORSHIP EXPERIENCE

Genetics (BIOL3349) – **Instructor**; University of Puerto Rico, Rio Piedras.

Epigenetics (BIOL4999) – **Instructor**; University of Puerto Rico, Rio Piedras.

Special Topics in Modern Biology (BIOL6999) – **Co-instructor**; University of Puerto Rico, Rio Piedras.

Doctoral Seminar (BIOL8995) – **Instructor**; University of Puerto Rico, Rio Piedras. 2018–2020.

Introduction to Research (BIOL4990) – **Instructor**; University of Puerto Rico, Rio Piedras.

Introduction to Molecular Bioinformatics (BIOL4360) – **Instructor**; University of Puerto Rico, Rio Piedras.

Biochemistry of the Cell (BIOL4545) – **Co-Instructor**; University of Puerto Rico, Rio Piedras.

Genetics (Junior/Senior level) – **Guest lecturer** (two lectures); The University of Texas at Austin.

Molecular Biology (Junior/Senior level) – **Teaching Assistant** (3 semesters); School of Biological Sciences. The University of Texas at Austin.

Neurotransmission: From molecules to behavior – **Co-instructor and Coordinator;** Ricardo Miledi Program for Neuroscience Training; Society for Neuroscience; Juriquilla, Mexico (2004)

Research Mentorship:

- Graduate advisor for four PhD and three MS students at the University of Puerto Rico, Rio Piedras.
- Mentored, trained, and supervised over 30 undergraduate students on independent research projects at the University of Puerto Rico, Rio Piedras.
- Mentored, trained, and supervised four graduate and ten undergraduate students at The University of Texas at Austin.

HONORS AND AWARDS

2019	Cold Spring Harbor Laboratory, Summer Course Attendee—Statistical Methods for Functional Genomics.
2018	NISBRE Young Investigator Travel Award.
2017, 2013	International Behavioural and Neural Genetics Society Travel Award.
2006	Outstanding Dissertation Award Nominee, The University of Texas at Austin.
2004	Bruce/Jones Alcohol and Addiction Research Travel Award.
2003	Professional Development Award, The University of Texas at Austin.
2002 – 2005	Bruce/Jones Graduate Fellowship in Alcohol and Addiction Research.
2001	Bruce/Jones Alcohol and Addiction Research Travel Award.
1998	University Co-op Undergraduate Research fellowship, The University of Texas at Austin.
1997 – 1998	Good Neighbor Scholarship, The University of Texas at Austin.

PROFESSIONAL SERVICE AND AFFILIATIONS

2024 – present	**Scientific Review Panel Member, National Institute of Health:** *Fellowships: Neurodevelopment, Oxidative Stress and Synaptic Plasticity – F03A*
2018 – present	**Ad Hoc Grant Reviewer,** National Institute of Health (*Neurotoxicology and Alcohol Study Section – NAL, NIDA Animal Genomics Program – Special Emphasis Panel); National Science Foundation; Austrian Science Fund.*
2019 – present	**Section Editor**, Neuroscience Insights.
2013 – 2016	**Member**, Latin American Research Network in Drug Addiction (LARNEDA).
2013 – present	**Member**, International Behavioural and Neural Genetics Society (IBANGS).
2012 – present	**Review Editor**, Frontiers in Genetics.
2012 – 2013	**Member**, Research Society on Alcoholism (RSoA).
2005 – present	**Ad Hoc Manuscript Reviewer**. *Journal of Biological Chemistry*, *PLoS ONE*, *JoVE, Pharmacology Biochemistry and Behavior*, *Heredity, Translational Psychiatry, Insects, Alcoholism: Clinical and Experimental Research, Journal of the Royal Society Interface, and others.*
2005 – present	**Member**, Society for Neuroscience (SFN).
2004 – 2008	**Member**, Genetics Society of America (GSA).

PEER-REVIEWED PUBLICATIONS

1. Ramirez-Roman ME, Fuenzalida-Uribe NL, Ayala-Santiago G, Agosto JL, **Ghezzi A** (2024) Alcohol-induced sleep dysregulation in Drosophila is dependent on the neuropeptide PDF. *BioRxiv* doi: https://doi.org/10.1101/2024.05.05.592572.
2. Acevedo-Gonzalez JP, Galindo-Cardona A, Fuenzalida-Uribe NL, Ortiz-Alvarado Y, **Ghezzi A**, Giray T (2024) Threshold of Defensive Response in Apis mellifera (Honey Bees) and Subsequent Brain Gene Expression in Reaction to Noxious Stimuli. *Entomologia Experimentalis et Applicata* 173:174–182.
3. Ruggieri AA, Livraghi L, Lewis JJ, Evans E, Cicconardi F, Hebberecht L, Ortiz-Ruiz Y, Montgomery SH, **Ghezzi A**, Rodriguez-Martinez JA, Jiggins CD, McMillan WO, Counterman BA, Papa R, Van Belleghem SM (2022) A butterfly pan-genome reveals that a large amount of structural variation underlies the evolution of chromatin accessibility. Genome Res 32:1862-1875.
4. Anqueira-González A, Acevedo-Gonzalez JP, Montes-Mercado A, Irizarry-Hernández C, Fuenzalida-Uribe NL, **Ghezzi A** (2021). Transcriptional correlates of chronic alcohol neuroadaptation in Drosophila larvae. *Front Behav Neurosci,15:768694.*
5. De Jesús-Olmo LA, Rodríguez N, Francia M, Alemán-Rios J, Pacheco-Agosto CJ, Ortega-Torres J, Nieves R, Fuenzalida-Uribe N**, Ghezzi A**, Agosto JL (2020) Pumilio regulates sleep homeostasis in response to chronic sleep deprivation in Drosophila melanogaster. *Front Neurosci 14, 319*.
6. Swapna I, **Ghezzi A**, York JM, Markham MR, Halling DB, Lu Y, Gallant JR, Zakon HH (2018) Electrostatic Tuning of a Potassium Channel in Electric Fish. *Curr Biol* 28:2094–2102.e5.
7. Mansour TA, Habib MR, Rodríguez LCV, Vázquez AH, Alers JM, **Ghezzi A**, Croll RP, Brown CT, Miller MW (2017) Central nervous system transcriptome of Biomphalaria alexandrina, an intermediate host for schistosomiasis. *BMC research notes* 10:729.
8. **Ghezzi A,** Li X, Lew LK, Wijesekera TP, Atkinson NS (2017) Alcohol-induced neuroadaptation is orchestrated by the histone acetyltransferase CBP. *Front Mol Neurosci* 10:103.
9. **Ghezzi A**, Zomeno M, Pietrzykowski AZ, Atkinson NS (2016) Immediate-early alcohol-responsive miRNA expression in Drosophila. *J Neurogenet* 30:195-204.
10. Troutwine B, **Ghezzi A**, Pietrzykowski AZ, Atkinson NS (2015) Alcohol resistance in Drosophila is modulated by the Toll innate immune pathway. *Genes Brain Behav* 15:382-94.
11. Krishnan HR*, Li X*, **Ghezzi A***, Atkinson NS (2015) A DNA element in the slo gene modulates ethanol tolerance. *Alcohol* 51:37-42. [*co-first authors]
12. Li X, **Ghezzi A**, Krishnan HR, Pohl JB, Bohm AY, Atkinson NS (2015) A histone modification identifies a DNA element controlling slo BK channel gene expression in muscle. *J Neurogenet* 29:124–134.
13. **Ghezzi A***, Liebeskind BJ*, Thompson A, Atkinson NS and Zakon HH (2014) Ancient association between cation leak channels and Mid1 proteins is conserved in fungi and animals. *Front Mol Neurosci* 7:15. [*co-first authors]
14. **Ghezzi A**, Krishnan HR, Atkinson NS (2014) Susceptibility to ethanol withdrawal seizures is produced by BK channel gene expression. *Addict Biol* 19:332–7.
15. **Ghezzi A**, Krishnan HR, Lew L, Prado FJ, Ong DS, Atkinson NS (2013) Alcohol-induced histone acetylation reveals a gene network involved in alcohol tolerance. *PLoS Genet* 9:e1003986.
16. Li X, **Ghezzi A**, Pohl JB, Bohm AY, Atkinson NS (2013) A DNA element regulates drug tolerance and withdrawal in Drosophila. *PLoS ONE* 8:e75549.
17. Pohl JB, **Ghezzi A**, Lew LK, Robles RB, Cormack L, Atkinson NS (2013) Circadian genes differentially affect tolerance to ethanol in Drosophila. *Alcohol Clin Exp Res* 37:1862-71.

18. **Ghezzi A***, Al-Hasan YM*, Krishnan HR, Wang Y, Atkinson NS (2013) Functional mapping of the neuronal substrates for drug tolerance in Drosophila. *Behav Genet* 43:227–240. [*co-first authors]
19. Robinson BG, Khurana S, Pohl JB, Li WK, **Ghezzi A**, Cady AM, Najjar K, Hatch MM, Shah RR, Bhat A, et al. (2012) A low concentration of ethanol impairs learning but not motor and sensory behavior in Drosophila larvae. *PLoS ONE* 7:e37394.
20. Krishnan HR, Al-Hasan YM, Pohl JB, **Ghezzi A**, Atkinson NS (2012) A role for dynamin in triggering ethanol tolerance. *Alcohol Clin Exp Res* 36:24–34.
21. Al-Hasan YM, Krishnan HR, **Ghezzi A**, Prado FJ, Robles RB, Atkinson NS (2011) Tolerance to anesthesia depends on synaptic proteins. *Behav Genet* 41:734–745.
22. **Ghezzi A**, Pohl JB, Wang Y, Atkinson NS (2010) BK channels play a counter-adaptive role in drug tolerance and dependence. *Proc Natl Acad Sci U S A* 107:16360–16365.
23. Wang Y, **Ghezzi A**, Yin JC, Atkinson NS (2009) CREB regulation of BK channel gene expression underlies rapid drug tolerance. *Genes Brain Behav* 8:369–376.
24. Hamada FN, Rosenzweig M, Kang K, Pulver SR, **Ghezzi A**, Jegla TJ, Garrity PA (2008) An internal thermal sensor controlling temperature preference in Drosophila. *Nature* 454:217–220.
25. Wang Y, Krishnan HR, **Ghezzi A**, Yin JC, Atkinson NS (2007) Drug-induced epigenetic changes produce drug tolerance. *PLoS Biol* 5:e265.
26. Cowmeadow RB, Krishnan HR, **Ghezzi A**, Al-Hasan YM, Wang YZ, Atkinson NS (2006) Ethanol tolerance caused by slowpoke induction in Drosophila. *Alcohol Clin Exp Res* 30:745–753.
27. **Ghezzi A**, Al-Hasan YM, Larios LE, Bohm RA, Atkinson NS (2004) slo K(+) channel gene regulation mediates rapid drug tolerance. *Proc Natl Acad Sci U S A* 101:17276–17281.

REVIEWS AND BOOK CHAPTERS

1. Ramirez-Roman ME, Billini CE, **Ghezzi A** (2018) Epigenetic mechanisms of alcohol neuroadaptation: insights from Drosophila. *Journal of Experimental Neuroscience* 12:1–8.
2. Park A, **Ghezzi A**, Wijesekera TP, Atkinson NS (2017) Genetics and genomics of alcohol responses in drosophila. *Neuropharmacology* 122:22–35.
3. Rothenfluh A, Troutwine BR, **Ghezzi A**, Atkinson NS (2014) The genetics of alcohol responses of invertebrate model systems. In: Noronha ABC, Cui C, Harris RA, Crabbe JC (eds) Neurobiology of alcohol dependence. Elsevier, Amsterdam, Netherlands.
4. **Ghezzi A**, Atkinson NS (2011) Homeostatic control of neural activity: a Drosophila model for drug tolerance and dependence. *Int Rev Neurobiol* 99:23–50.

PubMed link to a complete list of published work can be found here:
https://www.ncbi.nlm.nih.gov/myncbi/browse/collection/40073230/?sort=date&direction=descending

INVITED SEMINARS

- Epigenetic mechanisms of neuroadaptation to alcohol in Drosophila. **USRE Symposium, Rutgers Biomedical and Health Science University**; August 10, 2023.
- Molecular mechanisms of neuroadaptation to alcohol. **Puerto Rico Institute for Microbial Ecology Research, Division of Natural Sciences and Technology, Universidad Ana G. Méndez, Recinto de Gurabo; Gurabo, PR**; Mar 10, 2021.
- Genetics and epigenetic of alcohol neuroadaptation in Drosophila. **Department of Natural Sciences, University of Puerto Rico, Aguadilla Campus; Aguadilla, PR**; Feb 9, 2021.

- Molecular mechanisms of neuroadaptation to alcohol. **Department of Biology, University of Puerto Rico, Arecibo; Arecibo, PR**; Jan 28, 2021.
- Epigenetic mechanisms of alcohol neuroadaptation in Drosophila. **Department of Physiology. University of Puerto Rico, Medical Science Campus**; San Juan, PR; Oct 10, 2019.
- When you drink, keep the hat on —A story of epigenetics and alcohol neuroadaptation. **Oklahoma State University**. Stillwater, OK. February 28, 2019.
- Your brain in alcohol: a story on epigenetics and alcohol neuroadaptation. **Department of Biology, University of Puerto Rico, Cayey**; Cayey, PR; Nov 29, 2018.
- Molecular mechanisms of alcohol neuroadaptation. **Department of Biology, Universidad del Sagrado Corazon**; San Juan, PR; Oct 27, 2018.
- When you drink, keep the HAT on: A story on epigenetics and alcohol neuroadaptation. **AAAS-Caribbean Division Science Cafe**; Ocean Lab Brewing Company; Carolina, PR; May 25, 2018.
- Genetics and epigenetics of alcohol-neuroadaptation in drosophila. **Department of Biology, University of Puerto Rico, Bayamon**; Bayamon, PR; May 18, 2018.
- Genetics and epigenetics of alcohol neuroadaptation in Drosophila. **University of Puerto Rico-Rio Piedras**: RISE/MARC Seminar. San Juan, PR. February 2, 2018.
- Alcohol neuroadaptation in Drosophila: From genes to synapses. **Universidad Central del Caribe. Bayamon**, PR. September 1, 2017.
- Homeostatic neuroadaptation to alcohol in Drosophila. **Institute of Neurobiology, University of Puerto Rico, Medical Science Campus**; San Juan, PR; Apr 7, 2017.
- Homeostatic neuroadaptation to alcohol: From genes to behavior. **University of Puerto Rico-Rio Piedras** – Recruitment seminar. San Juan, PR. March 2, 2016.
- Homeostatic neuroadaptation to alcohol: From genes to behavior. **Texas A&M University, Kingsville**. Kingsville, TX. April 13, 2015.

CONFERENCE PRESENTATIONS

Selected Oral Presentations

- **Invited Speaker**: Neural modulation by alcohol exposure in Drosophila. Functional Logic of Neural Circuits Workshop; San Juan, PR; February 22-24, 2023.
- **Invited Seminar:** Molecular mechanisms of alcohol-induced neuroadaptation in Drosophila. Drug Addiction workshop-UPR-MUSC; University of Puerto Rico; San Juan, PR; May 10, 2022.
- **Invited Speaker**: Molecular mechanisms of alcohol-induced sleep disruption in Drosophila. 4th Puerto Rico Drosophila Neurobiology (Mini-Brains) Meeting; San Juan, PR; Nov 7, 2019.
- **Symposium Chair**: Organizer and Chair of the Symposium. 3rd Puerto Rico Drosophila Neurobiology (Mini-Brains) Meeting; San Juan, PR; Mar 16, 2019.
- **Invited Presentation**: Chromatin dynamics of Heliconius wing color pattern development. Pan American Heliconius meeting; University of Puerto Rico; San Juan, PR; Feb 1-2, 2019.
- **Invited Presentation:** Epigenetic regulation of gene networks during alcohol-induced neuroadaptation. COBRE 5th Annual Retreat. San Juan, PR; Apr 26-27, 2018.
- **Invited Presentation:** Homeostatic regulation of alcohol tolerance gene networks in Drosophila. International Behavioural and Neural Genetics Society - 19th Annual Genes, Brain & Behavior Meeting; Madrid, Spain; May 15-18, 2017.

- **Invited Speaker**: The genomic landscape of CREB regulation during alcohol neuroadaptation in Drosophila. Illumina Workshop. San Juan, PR. May 9, 2017.
- **Invited Speaker:** Homeostatic mechanisms of alcohol induced Neuroadaptation. Drosophila Network of Puerto Rico. Bayamon, PR. May 6, 2017.
- **Symposium Chair:** Epigenomic mechanisms of neuroadaptation and neurodegeneration. International Behavioural and Neural Genetics Society, Uppsala, Sweden. May 19–22, 2015.
- **Invited Speaker**: Homeostatic modulation of gene networks in alcohol tolerance and dependence in Drosophila. Joint Meeting of the Latin American Society for Biomedical Research on Alcoholism (LASBRA) and the Latin American Research Network in Drug Addiction (LARNEDA). Concepcion, Chile. October 16–19, 2013.
- **Conference Talk**: Epigenetic modulation of long-term neural adaptations that underlie alcohol tolerance and dependence in Drosophila. Annual Meeting of the International Behavioural and Neural Genetics Society. Leuven, Belgium. May 20–24, 2013.
- **Conference Talk**: A combinatorial epigenetic approach for the identification of novel genes involved in alcohol tolerance. Annual Scientific Meeting of the Research Society on Alcoholism. San Francisco, CA. June 23–27, 2012.
- **Conference Talk**: Drug-induced epigenetic remodeling of the *slo* BK-channel gene and drug tolerance. Society for Neuroscience Annual Meeting. Washington, DC. November 15–19, 2008.
- **Conference Talk**: Homeostatic transcriptional regulation of the *slowpoke* channel gene during drug tolerance modulates neural excitability. Annual Drosophila Research Conference. Houston, TX. March 29–April 2, 2006
- **Conference Talk**: *Slowpoke* K+ channel gene regulation mediates rapid drug tolerance. European Symposium on Drosophila Neurobiology. Neuchâtel, Switzerland. September 4–8, 2004.
- **Invited Speaker:** Modulation of ion channels and their role in rapid tolerance to solvent intoxication. Annual Symposium on Neuroscience, The University of Texas at Austin, Institute for Neuroscience. Austin, TX. March 23, 2003.

Selected Posters (presented at international conferences during the last five years)

- Poster: Jimenez-Vizcarrondo N, Del Valle-Colon C, Ghezzi A, Barnhart E;. Examining Glial Cell Mitochondrial Morphology and Drosophila Viability: Manipulating MARF to Explore Neuronal Function. Society for Neuroscience 2024; Chicago, IL; October 5 – 9, 2024.
- Poster: Kuchibhotla M, Montes-Mercado A, Rodriguez Cordero J, Marrero J, Maldonado-Valedon C, Agosto JL, Ghezzi A, Giray T, Perez-Hernandez ME. Temperature and Ethanol Dose-Dependent Regulation of Hemocyte-Mediated Ethanol Sensitivity. Society for Neuroscience 2024; Chicago, IL; October 5 – 9, 2024.
- Poster: Del Valle-Colon CD, Alvarez-Cortes MJ, Morales-Cancio SI, Montes-Mercado A, Fuenzalida-Uribe NL, Agosto JL, Ghezzi A. Tip60 histone acetyltransferase regulates PDF neuropeptide expression and alcohol-tolerance acquisition in Drosophila melanogaster. Emerging Researchers National (ERN) Conference in STEM; Washington, DC; March 14 – 16, 2024.
- Poster: Mercado-Suarez IA, Del Valle-Colon CD, Fuenzalida Uribe NL, Ghezzi A. Unveiling the influence of slowpoke on alcohol-induced neuroadaptations in Drosophila LNv. Emerging Researchers National (ERN) Conference in STEM; Washington, DC; March 14 – 16, 2024.
- Poster: Figueroa-Colon MA, Ghezzi A, Chiquillo K. Transcriptional profiling of Thalassia testudinum in nature reserve vs beach environment. Ocean Sciences Meeting Conference; New Orleans, LA; February 17 – 23 , 2024.

- Poster: Alvarez-Cortes MJ, Del Valle-Colon CD, Fuenzalida Uribe NL, Ghezzi A. Tip60 histone acetyltransferase regulates PDF neuropeptide expression and alcohol-tolerance acquisition in Drosophila melanogaster. Society for Neuroscience 2023; Washington DC; November 11 – 15, 2023.
- Poster: Morales-Cancio SI, Del Valle-Colon CD, Fuenzalida Uribe NL, Ghezzi A. Epigenetic modeling involved in ethanol response affects sleep behavior of Drosophila melanogaster. Society for Neuroscience 2023; Washington DC; November 11 – 15, 2023.
- Poster: Pujols P, Rivera K, Ghezzi A, Rodriguez-Fernandez IA. A potential role of the gut microbiome in promoting age related alcohol tolerance in Drosophila. Society for Neuroscience 2023; Washington DC; November 11 – 15, 2023.
- Poster: Colon-Sarriera JM, Fuenzalida Uribe NL, Del Valle-Colon CD, Mercado Rosario AS, Rodriguez-Fernandez IA, Ghezzi A. Chronic ethanol exposure during distinct developmental stages differentially affects adult behavior in Drosophila. SACNAS National Diversity in STEM (NDiSTEM) Conference; Portland, OR; October 28 – 30, 2023.
- Poster: Ramirez-Roman ME, Fuenzalida-Uribe NL, Ayala-Santiago G, Montes-Mercado A, Agosto JL, Ghezzi A. Alcohol-induced sleep dysregulation in Drosophila is dependent on the neuropeptide PDF. Genes, Brain & Behavior Meeting; International Behavioural and Neural Genetics Society; Galway, Ireland; May 22-25, 2023.
- Poster: Del Valle-Colón CD, Morales-Cancio SI, Álvarez-Cortés MJ, Montes-Mercado A, Rodríguez-Cordero JA, Agosto JL, Ghezzi A. The role of Tip60 in mechanisms of alcohol-induced sleep disruption. Society for Neuroscience; San Diego, CA; Nov 13-17, 2022.
- Poster: Fuenzalida-Uribe NL, Irizarry-Hernandez CS, Diaz-Nieves I, Ghezzi A. Neurophysiological correlates of alcohol response in the mushroom body of Drosophila melanogaster. Society for Neuroscience; San Diego, CA; Nov 13-17, 2022.
- Poster: Rodriguez-Cordero JA, Maldonado-Valedon CI, Ortiz Y, Ghezzi A, Rodriguez-Fernandez IA, Agosto JL. The role of Pumilio on intestinal stem cells. Society for Neuroscience; San Diego, CA; Nov 13-17, 2022.
- Poster: Koru YB, Courtney EC, Aviles-Rios E, Ortiz-Alvarado Y, Döke MA, Montes-Mercado A, Ruggieri AA, Rodriguez N, Giordano R, Donthu RK, Leon J, Ghezzi A, Giray T, Agosto JL. Gut microbes affect the onset of circadian rhythms and regulate gene expression in honey bee (Apis mellifera). Society for Neuroscience; San Diego, CA; Nov 13-17, 2022.
- Poster: Avilés-Ríos E, Courtney EC, Koru YB, Ortiz-Alvarado Y, Döke MA, Montes-Mercado A, Ruggieri AA, Rodriguez N, Giordano R, Donthu RK, Leon J, Ghezzi A, Giray T, Agosto JL. The development of circadian behavior is associated with changes in the expression of IGFBP-ASL in the brain of honey bees Apis mellifera. Society for Neuroscience; San Diego, CA; Nov 13-17, 2022.
- Poster: Montes-Mercado A, Dasta-Cruz C, Del Valle-Colón CD, Kuchibhotla M, Agosto JL, Ghezzi A. The role of histone acetyltransferase Tip60 in alcohol-induced neuroadaptations. Society for Neuroscience; San Diego, CA; Nov 13-17, 2022.
- Poster: Fuenzalida-Uribe NL, Irizarry-Hernandez C, Diaz-Nieves IA, Ghezzi A. Neurophysiological correlates of alcohol tolerance in the Mushroom Body of Drosophila melanogaster. International Congress Neuroethology 2022; Lisbon, Portugal; July 24–29, 2022.
- Poster: Kuchibhotla M. Montes A, Ortiz-Elias EW, Rodriguez JA, Agosto JL, Ghezzi A. Pumilio -a translational regulator- as a modulator of alcohol tolerance via macrophages. Society for Neuroscience, Neuroscience 2021; Online; Nov 3-7, 2021.
- Poster: Montes A, Dasta-Cruz C, Ramos-Rodriguez L, Del Valle-Colon C, Kuchibhotla M, Agosto JL, Ghezzi A. The role of histone acetyltransferase activity in alcohol-induced neuroadaptations. Society for Neuroscience, Neuroscience 2021; Online; Nov 3-7, 2021.

- Poster: Croslyn C, Ramos-De Jesus C, Acevedo JP, Ghezzi A. Temporal Clustering of Alcohol-Responsive genes in Drosophila. Genetics Society of America, Drosophila Research Conference; Online; Mar 22-29, 2021.
- Poster: Ramirez-Roman ME, Ayala-Santiago G, Agosto JL, Ghezzi A. Dose-dependent effect of ethanol on sleep patterns in Drosophila melanogaster. Society for Neuroscience – Global Connectome (Online); Jan 11-13, 2021.
- Poster: Ramirez-Roman ME, Ayala-Santiago G, Agosto JL, Ghezzi A. Role of the Drosophila small lateral ventral neurons in the regulation of behavioral responses to alcohol. Genetics Society of America, TAGC – The Allied Genetics Conference; Washington, DC (Online); Mar 22-29, 2020.

RESEARCH SUPPORT

Pending Support

NIH P30GM149367; Lasalde, Jose (PD), Ghezzi, Alfredo (PL) – COBRE III: Center for Neuroplasticity at the University of Puerto Rico—Administrative Supplement: Conserved role of the Wnt signaling in neuroplastic structural and behavioral adaptations to alcohol linked to learning and memory-associative tasks. Period: 07/24 – 06/25; Amount requested: $223,499

Current Support

USDA-NIFA 2023-70008-41027; Ghezzi, Alfredo (PI) – Genomics and bioinformatics for insular agriculture and food science, skills to meet challenges of the future. Period: 09/23 – 08/26; Award: $200,000

NSF 2321760 Agosto, Jose (PI), Ghezzi, Alfredo (Senior Personnel) – Collaborative Research: ACSER: Arecibo C3 - Center for Culturally Relevant and Inclusive Science Education, Computational Skills, and Community Engagement. Period: 11/23 – 06/28; Award: $900,000

NIH-NIGMS R16 GM145475; Jimenez, Carlos (PI), Ghezzi, Alfredo (Consultant) – Elucidating Ih Biophysical Epigenetic Modifications in VTA Dopaminergic Neurons after Contingent and Non-Contingent Cocaine Administration; Period: 07/2022 – 06/2026; Award: $300,000 (direct costs)

NIH-NIGMS P20 GM103642, Lasalde, Jose (PD); Sub-Project ID: 5747; Ghezzi, Alfredo (PL) – COBRE II Project1: Epigenetic control of transcriptional dynamics in long-term alcohol neuroadaptation. Period: 07/2018 – 06/2023; Award: $1,130,050

NSF 1736026; Papa, Riccardo (PI), Ghezzi, Alfredo (Co-PI) – RII Track-2 FEC: Genomic Logic Underlying Adaptive Morphological Divergence. Period: 08/17 – 07/21; Award: $4,000,000

Completed Support

FIPI: University of Puerto Rico, Rio Piedras; Ghezzi, Alfredo (PI) – Effects of alcohol exposure on the neural mechanisms of sleep. Period: 10/2019 – 06/2021; Award: $20,000

FIPI: University of Puerto Rico, Rio Piedras; Ghezzi, Alfredo (PI) – Epigenetic Dynamics of Alcohol-induced Neuroadaptation. Period: 10/2016 – 06/2018; Award: $20,000

NIH-NIAAA — R01 AA018037; Atkinson, Nigel (PI), Ghezzi, Alfredo (Senior Personnel) – Epigenetic dissection of functional ethanol tolerance and dependence. Period: 09/2008 – 06/2016; Award: $1,500,000

Bruce/Jones Fellowship in Alcohol and Addiction Research; Ghezzi, Alfredo (PI) – Transcriptional modulation of ion channels in drug tolerance. Period: 09/2002 – 08/2005; Award: $75,000