

TENURE AND PROMOTION CURRICULUM VITAE
OF
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EDUCATION

<i>Degree</i>	<i>Institution</i>	<i>Field</i>	<i>Dates</i>
Ph.D.	University of A Coruna (Spain)	Biology	2001-2005
M.S.	University of A Coruna (Spain)	Genetics	1999-2001
B.S.	University of A Coruna (Spain)	Biology	1995-1999

FULL-TIME ACADEMIC EXPERIENCE

<i>Institution</i>	<i>Rank</i>	<i>Field</i>	<i>Dates</i>
Univ. A Coruna (Spain)	Assistant Professor	Biology	01/2009-06/2013
Univ. of Victoria (Canada)	Marie Curie Postdoctoral	Biochemistry	01/2006-06/2008
Univ. of Victoria (Canada)	Postdoctoral Associate	Biochemistry	09/2005-12/2005
Spanish Research Council	Visiting Scholar	Molecular Biology	12/2004-03/2005
University of Tokyo (Japan)	Visiting Scholar	Marine Biology	01/2001-03/2001
Spanish Research Council	Visiting Scholar	Molecular Biology	10/2000-12/2000
Univ. A Coruna (Spain)	Graduate Student	Biology	10/1999-01/2005

PART-TIME ACADEMIC EXPERIENCE

<i>Institution</i>	<i>Rank</i>	<i>Field</i>	<i>Dates</i>
Univ. Leon (Spain)	Adjunct Professor	Biology	01/2009-06-2009

NON-ACADEMIC EXPERIENCE

N/A

EMPLOYMENT RECORD AT FIU

<i>Rank</i>	<i>Dates</i>
Assistant Professor	08/2013-present

PUBLICATIONS IN DISCIPLINE

Please note: Postdocs, graduate and undergraduate students from my lab are indicated in boldface.

Bibliometric data: 1830 citations (1014 since arriving at FIU), h-index = 27 (source Google Scholar).

Books

2. Eirin-Lopez, J. M. (2013). *About Evolution: keys to understanding how our genetic material evolves* (University of A Coruna Press, Spain). University of A Coruna Press, Spain.

1. Rivera-Casas, C. (**Graduate Student**), Mendez, J., & Eirin-Lopez, J. M. (2012). *Insights into the Study of Chromatin in Molluscs: Structure and Molecular Evolution of Histones in Pectinids* (EAE Press, Spain). EAE Press, Spain.

Articles

62. Garcia-Souto, D., Sumner-Hempel, A., Ferverza, S., Perez-Garcia, C., Torreiro, A., Gonzalez-Romero, R. (**Postdoc**), Eirin-Lopez, J. M., Moran, P., & Pasantes, J. J. (2017). Detection of invasive and cryptic species in marine mussels (Bivalvia, Mytilidae): A chromosomal perspective. *Journal for Nature Conservation*, 39, 58-67. (IF = 2.60, Q2).

61. Rivera-Casas, C. (**Graduate_Student**), Gonzalez-Romero, R. (**Postdoc**), Garduño, R. A., Cheema, M. S., Ausio, J., & Eirin-Lopez, J. M. (2017). Molecular and Biochemical Methods Useful for the Epigenetic Characterization of Chromatin-Associated Proteins in Bivalve Molluscs. *Frontiers in Physiology*, 8, 490. (IF = 3.92, Q1).
60. Prego-Faraldo, M. V. (**Graduate_Student**), Vieira, L. R., Eirin-Lopez, J. M., Méndez, J., & Guilhermino, L. (2017). Transcriptional and biochemical analysis of antioxidant enzymes in the mussel *Mytilus galloprovincialis* during experimental exposures to the toxic dinoflagellate *Prorocentrum lima*. *Marine Environmental Research*, 129, 304-315. (IF = 2.45, Q1).
59. Leung, A., Jardim, F.-P., Savic, N., Monneau, Y. R., González-Romero, R. (**Postdoc**), Gudavicius, G., Eirin-Lopez, J. M., Bartke, T., Mackereth, C. D., Ausio, J., & Nelson, C. J. (2017). Basic surface features of nuclear FKBP facilitate chromatin binding. *Nature Scientific Reports*, 7, 3795. (IF = 4.26, Q1).
58. Prego-Faraldo, M. V. (**Graduate_Student**), Florez-Barros, F., Fernandez-Tajes, J., Eirin-Lopez, J. M., & Mendez, J. (2017). Transcriptome profiling and differential gene expression in mussels exposed to *Prorocentrum lima*, a dinoflagellate producing DSP toxins. *Aquaculture*, 472, 152-153. (IF = 2.60, Q1).
57. Gonzalez-Romero, R. (**Postdoc**), Suarez-Ulloa, V. (**Graduate_Student**), Rodriguez-Casariago, J. (**Graduate_Student**), Garcia-Souto, D., Diaz, G. (**Undegraduate_Student**), Smith, A., Pasantes, J. J., Rand, G., & Eirin-Lopez, J. M. (2017). Effects of Florida Red Tides on histone variant expression and DNA methylation in the Eastern oyster *Crassostrea virginica*. *Aquatic Toxicology*, 186, 196-204. (IF = 3.45, Q1).
56. Rivera-Casas, C. (**Graduate_Student**), González-Romero, R. (**Postdoc**), Vizoso-Vazquez, A., Cheema, M. S., Cerdán, M. E., Méndez, J., Ausio, J., & Eirin-Lopez, J. M. (2016). Characterization of mussel H2A.Z.2: a new H2A.Z variant preferentially expressed in germinal tissues from *Mytilus*. *Biochemistry and Cell Biology*, 94, 480-490. (IF = 2.15, Q2).
55. Rivera-Casas, C. (**Graduate_Student**), Gonzalez-Romero, R. (**Postdoc**), Cheema, M. S., Ausio, J., & Eirin-Lopez, J. M. (2016). The characterization of macroH2A beyond vertebrates supports an ancestral origin and conserved role for histone variants in chromatin. *Epigenetics*, 11, 415-25. (IF = 5.11, Q1).
54. Leung, A., Cheema, M., González-Romero, R. (**Postdoc**), Eirin-Lopez, J. M., Ausio, J., & Nelson, C. J. (2016). Unique yeast histone sequences influence octamer and nucleosome stability. *FEBS Letters*, 590, 2629-38. (IF = 3.52, Q1).
53. Prego-Faraldo, M. V. (**Graduate_Student**), Valdíglesias, V., Laffon, B., Mendez, J., & Eirin-Lopez, J. M. (2016). Early Genotoxic and Cytotoxic Effects of the Toxic Dinoflagellate *Prorocentrum lima* in the Mussel *Mytilus galloprovincialis*. *Toxins*, 8. (IF = 3.03, Q1).
52. Prego-Faraldo, M. V. (**Graduate_Student**), Valdíglesias, V., Laffon, B., Eirin-Lopez, J. M., & Méndez, J. (2015). In vitro analysis of early genotoxic and cytotoxic effects of okadaic acid in different cell types of the mussel *Mytilus galloprovincialis*. *Journal of Toxicology and Environmental Health - Part A: Current Issues*, 78, 814-24. (IF = 2.67, Q1).
51. Suarez-Ulloa, V. (**Graduate_Student**), Gonzalez-Romero, R. (**Postdoc**), & Eirin-Lopez, J. M. (2015). Environmental epigenetics: A promising venue for developing next-generation pollution biomonitoring tools in marine invertebrates. *Marine Pollution Bulletin*, 98, 5-13. (IF = 2.84, Q1).
50. Suarez-Ulloa, V. (**Graduate_Student**), Fernandez-Tajes, J., Aguiar-Pulido, V., Prego-Faraldo, M. V. (**Graduate_Student**), Florez-Barros, F., Sexto-Iglesias, A., Mendez, J., & Eirin-Lopez, J. M. (2015). Unbiased high-throughput characterization of mussel transcriptomic responses to sublethal concentrations of the biotoxin

okadaic acid. *PeerJ*, 3, e1429. (IF = 2.84, Q1).

49. Ruiz, M. F., Alvarez, M., Eirin-Lopez, J. M., Sarno, F., Kremer, L., Barbero, J. L., & Sánchez, L. (2015). An unusual role for doublesex in sex determination in the dipteran *Sciara*. *Genetics*, 200, 1181-99. (IF = 3.79, Q1).

48. González-Romero, R. (**Postdoc**), Eirin-Lopez, J. M., & Ausió, J. (2015). Evolution of high mobility group nucleosome-binding proteins and its implications for vertebrate chromatin specialization. *Molecular Biology and Evolution*, 32, 121-31. (IF = 4.00, Q1).

47. Eirin-Lopez, J. M., & Sánchez, L. (2015). The comparative study of five sex-determining proteins across insects unveils high rates of evolution at basal components of the sex determination cascade. *Development Genes and Evolution*, 225, 23-30. (IF = 2.51, Q2).

46. Gonzalez-Romero, R. (**Postdoc**), Rivera-Casas, C. (**Graduate Student**), Mendez, J., Eirin-Lopez, J. M., & Ausio, J. (2013). Characterization of histone variants in bivalve molluscs and their relevance in the development of chromatin-based tests for evaluating okadaic acid genotoxicity in the marine environment. *Biochemistry and Cell Biology*, 91, 395. (IF = 1.52, Q4).

45. Suárez-Ulloa, V. (b), Fernández-Tajes, J., Manfrin, C., Gerdol, M., Venier, P., & Eirin-Lopez, J. M. (2013). Bivalve omics: state of the art and potential applications for the biomonitoring of harmful marine compounds. *Marine Drugs*, 11, 4370-89. (IF = 3.51, Q1).

44. Civetta, A., Eirin-Lopez, J. M., Kulathinal, R., & Marshall, J. L. (2013). The evolution of sex-related traits and genes 2012. *International Journal of Evolutionary Biology*, 2013, 590769.

43. Aguiar-Pulido, V., Suarez-Ulloa, V. (**Graduate Student**), Rivero, D., Eirin-Lopez, J. M., & Dorado, J. (2013). Clustering of gene expression profiles applied to marine research. *IWANN 2013, Part I, Lecture Notes on Computer Science (LNCS)*, 7902, 453-462.

42. Prego-Faraldo, M. V. (**Graduate Student**), Valdiglesias, V., Méndez, J., & Eirin-Lopez, J. M. (2013). Okadaic acid meet and greet: an insight into detection methods, response strategies and genotoxic effects in marine invertebrates. *Marine Drugs*, 11, 2829-45. (IF = 3.51, Q1).

41. Eirin-Lopez, J. M. (2013). A computer lab exploring evolutionary aspects of chromatin structure and dynamics for an undergraduate chromatin course. *Biochemistry and Molecular Biology Education*, 41, 95-102. (IF = 0.59, Q4).

40. Suárez-Ulloa, V. (**Graduate Student**), Fernández-Tajes, J., Aguiar-Pulido, V., Rivera-Casas, C. (**Graduate Student**), González-Romero, R. (**Postdoc**), Ausio, J., Mendez, J., Dorado, J., & Eirin-Lopez, J. M. (2013). The CHROMEVALOA database: a resource for the evaluation of Okadaic Acid contamination in the marine environment based on the chromatin-associated transcriptome of the mussel *Mytilus galloprovincialis*. *Marine Drugs*, 11, 830-41. (IF = 3.51, Q1).

39. Finn, R. M., Ellard, K., Eirin-Lopez, J. M., & Ausió, J. (2012). Vertebrate nucleoplasmin and NASP: egg histone storage proteins with multiple chaperone activities. *The FASEB Journal*, 26, 4788-804. (IF = 5.70, Q1).

38. González-Romero, R. (**Graduate Student**), Rivera-Casas, C. (**Graduate Student**), Frehlick, L. J., Méndez, J., Ausió, J., & Eirin-Lopez, J. M. (2012). Histone H2A (H2A.X and H2A.Z) variants in molluscs: molecular characterization and potential implications for chromatin dynamics. *PLoS ONE*, 7, e30006. (IF = 3.73, Q1).

37. Talbert, P. B., K. Ahmad, G. Almouzni, J. Ausio, F. Berger, P.L. Bhalla, W.M. Bonner, W.Z. Cande, B.P.

Chadwick, S.W.L. Chan, G.A.M. Cross, L. Cui, S.I. Dimitrov, D. Doenecke, J.M. Eirin-López, M.A. Gorovsky, S.B. Hake, B.A. Hamkalo, S. Holec, S.E. Jacobsen, K. Kamieniarz, S. Khochbin, A.G. Ladurner, D. Landsman, J.A. Latham, B. Loppin, H.S. Malik, W.F. Marzluff, J.R. Pehrson, J. Postberg, M. B Singh, R. Schneider, M.M. Smith, E. Thompson, M.E. Torres-Padilla, D.J. Tremethick, B.M. Turner, J.H. Waterborg, H. Wollmann, R. Yelagandula, B. Zhu, & S. Henikoff (2012). A unified phylogeny-based nomenclature for histone variants. *Epigenetics & Chromatin*, 5, 7. (IF = 4.19, Q1).

36. González-Romero, R. (**Graduate_Student**), Rivera-Casas, C. (**Graduate_Student**), Fernández-Tajes, J., Ausió, J., Méndez, J., & Eirin-Lopez, J. M. (2012). Chromatin specialization in bivalve molluscs: a leap forward for the evaluation of Okadaic Acid genotoxicity in the marine environment. *Comparative Biochemistry and Physiology - C Toxicology and Pharmacology*, 155, 175-81. (IF = 2.71, Q3).

35. Eirin-Lopez, J. M., & Ausió, J. (2011). Boule and the Evolutionary Origin of Metazoan Gametogenesis: A Grandpa's Tale. *International Journal of Evolutionary Biology*, 2011, 972457.

34. Civetta, A., Eirin-Lopez, J. M., Kulathinal, R., & Marshall, J. L. (2011). The evolution of sex-related traits and genes. *International Journal of Evolutionary Biology*, 2011, 807218.

33. Kasinsky, H. E., Eirin-Lopez, J. M., & Ausió, J. (2011). Protamines: structural complexity, evolution and chromatin patterning. *Protein and Peptide Letters*, 18, 755-71. (IF = 1.94, Q3).

32. Eirin-Lopez, J. M., Mendez, J., Ausio, J., & Gonzalez-Romero, R. (**Graduate_Student**). (2011). The key role of histones. *Scientific American (edition Spain)*, Dec 2011, 36-43.

31. González-Romero, R. (**Graduate_Student**), Rivera-Casas, C. (**Graduate_Student**), Ausió, J., Méndez, J., & Eirin-Lopez, J. M. (2010). Birth-and-death long-term evolution promotes histone H2B variant diversification in the male germinal cell line. *Molecular Biology and Evolution*, 27, 1802-12. (IF = 5.51, Q1).

30. Ishibashi, T., Li, A., Eirin-Lopez, J. M., Zhao, M., Missiaen, K., Abbott, D. W., Meistrich, M., Hendzel, M. J., Hunt, D., & Ausió, J. (2010). H2A.Bbd: an X-chromosome-encoded histone involved in mammalian spermiogenesis. *Nucleic Acids Research*, 38, 1780-9. (IF = 7.84, Q1).

29. Freire, R., Arias, A., Insua, A. M., Méndez, J., & Eirin-Lopez, J. M. (2010). Evolutionary dynamics of the 5S rDNA gene family in the mussel *Mytilus*: mixed effects of birth-and-death and concerted evolution. *Journal of Molecular Evolution*, 70, 413-26. (IF = 2.31, Q3).

28. Sarno, F., Ruiz, M. F., Eirin-Lopez, J. M., Perondini, A. L., Selivon, D., & Sánchez, L. (2010). The gene transformer-2 of *Anastrepha* fruit flies (Diptera, Tephritidae) and its evolution in insects. *BMC Evolutionary Biology*, 10, 140. (IF = 3.70, Q2).

27. Eirin-Lopez, J. M., & Ausió, J. (2009). Origin and evolution of chromosomal sperm proteins. *BioEssays*, 31, 1062-70. (IF = 5.12, Q1).

26. Dryhurst, D., Ishibashi, T., Rose, K. L., Eirin-Lopez, J. M., McDonald, D., Silva-Moreno, B., Veldhoen, N., Helbing, C. C., Hendzel, M. J., Shabanowitz, J., & Ausió, J. (2009). Characterization of the histone H2A.Z-1 and H2A.Z-2 isoforms in vertebrates. *BMC Biology*, 7, 86. (IF = 5.64, Q1).

25. González-Romero, R. (**Graduate_Student**), Ausió, J., Méndez, J., & Eirin-Lopez, J. M. (2009). Histone genes of the razor clam *Solen marginatus* unveil new aspects of linker histone evolution in protostomes. *Genome*, 52, 597-607. (IF = 1.71, Q3).

24. Eirin-Lopez, J. M., González-Romero, R. (**Graduate_Student**), Dryhurst, D., Ishibashi, T., & Ausió, J. (2009). The evolutionary differentiation of two histone H2A.Z variants in chordates (H2A.Z-1 and H2A.Z-2) is

- mediated by a stepwise mutation process that affects three amino acid residues. *BMC Evolutionary Biology*, 9, 31. (IF = 4.29, Q1).
23. Eirin-Lopez, J. M., Frehlick, L. J., Chiva, M., Saperas, N., & Ausió, J. (2008). The sperm proteins from amphioxus mirror its basal position among chordates and redefine the origin of vertebrate protamines. *Molecular Biology and Evolution*, 25, 1705-13. (IF = 7.28, Q1).
22. González-Romero, R. (**Graduate_Student**), Ausió, J., Méndez, J., & Eirin-Lopez, J. M. (2008). Early evolution of histone genes: prevalence of an "orphan" H1 lineage in protostomes and birth-and-death process in the H2A family. *Journal of Molecular Evolution*, 66, 505-18. (IF = 2.76, Q2).
21. González-Romero, R. (**Graduate_Student**), Méndez, J., Ausió, J., & Eirin-Lopez, J. M. (2008). Quickly evolving histones, nucleosome stability and chromatin folding: all about histone H2A.Bbd. *Gene*, 413, 1-7. (IF = 2.58, Q3).
20. Eirin-Lopez, J. M., Ishibashi, T., & Ausió, J. (2008). H2A.Bbd: a quickly evolving hypervariable mammalian histone that destabilizes nucleosomes in an acetylation-independent way. *The FASEB Journal*, 22, 316-26. (IF = 7.05, Q1).
19. Abbott, D. W., Eirin-Lopez, J. M., & Boraston, A. B. (2008). Insight into ligand diversity and novel biological roles for family 32 carbohydrate-binding modules. *Molecular Biology and Evolution*, 25, 155-67. (IF = 7.28, Q1).
18. Ruiz, M. F., Milano, A., Salvemini, M., Eirin-Lopez, J. M., Perondini, A. L., Selivon, D., Polito, C., Saccone, G., & Sánchez, L. (2007). The gene transformer of anastrepha fruit flies (Diptera, tephritidae) and its evolution in insects. *PLoS ONE*, 2, e1239. (IF = 4.35, Q1).
17. Ruiz, M. F., Eirin-Lopez, J. M., Stefani, R. N., Perondini, A. L., Selivon, D., & Sánchez, L. (2007). The gene doublesex of *Anastrepha* fruit flies (Diptera, Tephritidae) and its evolution in insects. *Development Genes and Evolution*, 217, 725-31. (IF = 2.42, Q3).
16. Eirin-Lopez, J. M., & Ausió, J. (2007). H2A.Z-Mediated genome-wide chromatin specialization. *Current Genomics*, 8, 59-66. (IF = 2.42, Q3).
15. Eirin-Lopez, J. M., & Ausio, J. (2007). Evolutions and revolutions of nuclear chaperones in chromatin remodeling: the nucleophosmin-nucleoplasmin family. *Biochemistry and Cell Biology*, 85, 527. (IF = 2.42, Q3).
14. Frehlick, L. J., Eirin-Lopez, J. M., & Ausió, J. (2007). New insights into the nucleophosmin/nucleoplasmin family of nuclear chaperones. *BioEssays*, 29, 49-59. (IF = 5.40, Q1).
13. Saperas, N., Chiva, M., Casas, M. T., Campos, J. L., Eirin-Lopez, J. M., Frehlick, L. J., Prieto, C., Subirana, J. A., & Ausió, J. (2006). A unique vertebrate histone H1-related protamine-like protein results in an unusual sperm chromatin organization. *FEBS Journal*, 273, 4548-61. (IF = 3.03, Q2).
12. Eirin-Lopez, J. M., Frehlick, L. J., & Ausió, J. (2006). Long-term evolution and functional diversification in the members of the nucleophosmin/nucleoplasmin family of nuclear chaperones. *Genetics*, 173, 1835-50. (IF = 4.24, Q1).
11. Eirin-Lopez, J. M., Lewis, J. D., Howe, L. A., & Ausió, J. (2006). Common phylogenetic origin of protamine-like (PL) proteins and histone H1: Evidence from bivalve PL genes. *Molecular Biology and Evolution*, 23, 1304-17. (IF = 6.73, Q1).
10. Eirin-Lopez, J. M., & Ausio, J. (2006). Histone H1 function and distribution in chromatin: what does

molecular evolution tell us about it? *Biochemistry and Cell Biology*, 84, 658. (IF = 3.48, Q2).

9. Frehlick, L. J., Eirin-Lopez, J. M., Jeffery, E. D., Hunt, D. F., & Ausió, J. (2006). The characterization of amphibian nucleoplasmins yields new insight into their role in sperm chromatin remodeling. *BMC Genomics*, 7, 99. (IF = 4.03, Q1).

8. Frehlick, L. J., Eirin-Lopez, J. M., Prado, A., Su, H. W., Kasinsky, H. E., & Ausió, J. (2006). Sperm nuclear basic proteins of two closely related species of Scorpaeniform fish (*Sebastes maliger*, *Sebastolobus* sp.) with different sexual reproduction and the evolution of fish protamines. *Journal of Experimental Zoology. Part A, Comparative Experimental Biology*, 305, 277-87. (IF = 1.35, Q2).

7. Eirin-Lopez, J. M., Frehlick, L. J., & Ausió, J. (2006). Protamines, in the footsteps of linker histone evolution. *Journal of Biological Chemistry*, 281, 1-4. (IF = 5.81, Q1).

6. Eirin-Lopez, J. M., Ruiz, M. F., González-Tizón, A. M., Martínez, A., Ausió, J., Sánchez, L., & Méndez, J. (2005). Common evolutionary origin and birth-and-death process in the replication-independent histone H1 isoforms from vertebrate and invertebrate genomes. *Journal of Molecular Evolution*, 61, 398-407. (IF = 2.70, Q2).

5. Li, A., Eirin-Lopez, J. M., & Ausió, J. (2005). H2AX: tailoring histone H2A for chromatin-dependent genomic integrity. *Biochemistry and Cell Biology*, 83, 505-15. (IF = 2.87, Q2).

4. Eirin-Lopez, J. M., González-Tizón, A. M., Martínez, A., & Méndez, J. (2004). Birth-and-death evolution with strong purifying selection in the histone H1 multigene family and the origin of orphon H1 genes. *Molecular Biology and Evolution*, 21, 1992-2003. (IF = 6.35, Q1).

3. Serna, E., Gorab, E., Ruiz, M. F., Goday, C., Eirin-Lopez, J. M., & Sánchez, L. (2004). The gene Sex-lethal of the Sciaridae family (order Diptera, suborder Nematocera) and its phylogeny in dipteran insects. *Genetics*, 168, 907-21. (IF = 4.14, Q1).

2. Eirin-Lopez, J. M., Fernanda Ruiz, M., González-Tizón, A. M., Martínez, A., Sánchez, L., & Méndez, J. (2004). Molecular evolutionary characterization of the mussel *Mytilus* histone multigene family: first record of a tandemly repeated unit of five histone genes containing an H1 subtype with "orphon" features. *Journal of Molecular Evolution*, 58, 131-44. (IF = 2.75, Q2).

1. Eirin-Lopez, J. M., González-Tizón, A. M., Martínez, A., & Méndez, J. (2002). Molecular and evolutionary analysis of mussel histone genes (*Mytilus* spp.): possible evidence of an "orphon origin" for H1 histone genes. *Journal of Molecular Evolution*, 55, 272-83. (IF = 3.04, Q2).

Proceedings

1. Aguiar-Pulido V., Suarez-Ulloa, V. (**Graduate_Student**), Eirin-Lopez, J. M., & G. Narasimhan (2016). Network-inspired approaches for transcriptomic analyses. *IWBBIO Proceedings 2016:437-440*.

Chapters in Books (give complete bibliographical references)

6. Beal, A. (**Graduate_Student**), Rodriguez-Casariago, J. (**Graduate_Student**), Rivera-Casas, C. (**Postdoc**), Suarez-Ulloa, V. (**Postdoc**), & Eirin-Lopez, J. M. (2018). Marine Epigenomic Applications. In *Marine Organisms Population Genomics*. Rajora, O.P., Oleksiak, M., Eds. Springer Science+Media. *In press*.

5. Aguiar-Pulido, V., Suarez-Ulloa, V. (**Graduate_Student**), Eirin-Lopez, J. M., Pereira, J., & Narasimhan, G. (2015). Computational Methods in Epigenetics. In *Personalized Epigenetics*. Tollefsbol, T., Ed. (pp. 154-175). Elsevier.

4. Eirin-Lopez, J. M., Rebordinos, L., Rooney, A. P., & Rozas, J. (2012). The birth-and-death evolution of multigene families revisited. In *Genome Dynamics*. Garrido-Ramos, M.A., Ed. (pp. 170-96). Karger.
3. Eirin-Lopez, J. M., Gonzalez-Romero, R. (**Graduate_Student**), Dryhurst, D., Mendez, J., & Ausio, J. (2009). Long-term evolution of histone families: old notions and new insights into their mechanisms of diversification across eukaryotes. In *Evolutionary Biology: Concept, Modeling and Application*. Pontarotti, P., Ed. (pp. 139-162). Springer.
2. Ausió, J., Eirin-Lopez, J. M., & Frehlick, L. J. (2007). Evolution of vertebrate chromosomal sperm proteins: implications for fertility and sperm competition. In: *Spermatology: Society of Reproduction and Fertility supplement*. Roldan, E.R.S., Gomendio, M., Eds. (pp. 63-79). Nottingham University Press.
1. Eirin-Lopez, J. M. (2000). Molecular, phylogenetic and evolutionary study of histone H1 and H3 genes: molecular markers in marine biology and aquaculture. In *5th Meeting of Young Researchers Xunta de Galicia Eds.* (pp. 52-62). Xunta de Galicia, Spain.

Government Reports or Monographs

N/A

Book Reviews

N/A

OTHER PUBLICATIONS

N/A

PRESENTED PAPERS, AND LECTURES

52. Eirin-Lopez, J. M. (2018). Epigenetic Mechanisms Underlying Coral Responses to Global Change. In *Gordon Research Conference in Global Change*. Waterville Valley NH, USA.
52. Eirin-Lopez, J. M. (2018). Epigenetic regulation of gene expression and phenotypic plasticity. In *Department of Biology, University of Puerto Rico - Rio Piedras*. San Juan, Puerto Rico, USA.
51. Beal, A. (**Graduate_Student**), & Eirin-Lopez, J. M. (2018). A new tool for the biologist's toolbox? In *FIU Biosymposium*. Miami FL, USA.
50. Rodriguez-Casariogo, J. (**Graduate_Student**), & Eirin-Lopez, J. M. (2018). Nutrient loading hinders mechanisms involved in the epigenetic maintenance of genome integrity in the stony coral *Acropora cervicornis*. In *FIU Biosymposium*. Miami FL, USA.
49. Eirin-Lopez, J. M. (2018). Transgenerational epigenetics in oysters. In *The University of Hong Kong*. Hong Kong, China.
48. Eirin-Lopez, J. M. (2018). Epigenetic keys to coral reef resilience and restoration in the age of global climate change. In *Department of Biology, Eberly College of Science, The Pennsylvania State University*. University Park, PA, USA.
47. Eirin-Lopez, J. M. (2018). Unique and common patterns in the stress response of the Pacific oyster *Crassostrea gigas*. In *109th Meeting of the National Shellfisheries Association*. Seattle, WA, USA.
46. Eirin-Lopez, J. M. (2017). Epigenetic basis of coral responses to global change in South Florida. In *Marine*

Science Seminar Series, Department of Biological Sciences, Florida International University. Miami FL, USA.

45. Eirin-Lopez, J. M. (2017). Epigenetic Mechanisms Underlying Acclimatory Responses to Nutrient Stress in the Staghorn Coral *Acropora cervicornis*. In *Gordon Research Conference in Molecular Ecology*. Hong Kong, China.

44. Suarez-Ulloa, V. (Graduate_Student), & Eirin-Lopez, J. M. (2017). Effects of Florida Red Tides on histone variant expression and DNA methylation in the Eastern oyster *Crassostrea virginica*. In *FIU Biosymposium*. Miami FL, USA.

43. Eirin-Lopez, J. M., & Rodriguez-Casariago, J. (Graduate_Student). (2017). Coral responses to global change: an epigenetic perspective. In *Coral Reef Conservation Program Learning Exchange, Florida Department of Environmental Protection*. Ft. Lauderdale, FL, USA.

42. Eirin-Lopez, J. M. (2017). Effects of Florida Red Tides on histone variant expression and DNA methylation in the Eastern oyster *Crassostrea virginica*. In *109th Meeting of the National Shellfisheries Association*. Knoxville, TN, USA.

41. Rodriguez-Casariago, J. (Graduate_Student), & Eirin-Lopez, J. M. (2017). Preliminary analysis of the epigenetic mechanisms underlying acclimatory responses to nutrient pollution in stony corals. In *FIU Biosymposium*. Miami FL, USA.

40. Suarez-Ulloa, V. (Graduate_Student), & Eirin-Lopez, J. M. (2017). Transcriptional patterns of chromatin-associated genes in response to environmental stress revealed by network analysis. In *109th Meeting of the National Shellfisheries Association*. Knoxville, TN, USA.

39. Eirin-Lopez, J. M. (2016). Epigenetic effects of Florida Red Tides on marine invertebrates. In *Asilomar Chromatin and Chromosomes Conference*. Asilomar, CA, USA.

38. Garcia-Souto, D., Eirin-Lopez, J. M., & Pasantes, J. J. (2016). Invasive and cryptic species in marine mussels (*Bivalvia*, *Mytilidae*): A chromosomal perspective. In *I International Symposium on Advances in Marine Mussel Research*. Vigo, Spain.

37. Garcia-Souto, D., Eirin-Lopez, J. M., & Pasantes, J. J. (2016). Cytogenetic analysis on the invasive mussel *Perna perna* and *Brachidontes* sp. In *I International ALERTTOOLS Workshop: Science & Educational Strategies for Early Detection of Bioinvaders*. Aviles, Spain.

36. Diaz, G. (Undergraduate_Student), & Eirin-Lopez, J. M. (2016). Epigenetic response in *Crassostrea virginica* (Eastern oyster) to *Karenia brevis* Florida Red Tides. In *Ronald E. McNair Scholars Conference*. Miami, FL, USA.

35. Suarez-Ulloa, V. (Graduate_Student), & Eirin-Lopez, J. M. (2016). Network-based analysis of chromatin-associated gene expression dynamics in response to environmental stress. In *Conference of the International Society for Computational Biology*. Orlando, FL, USA.

34. Eirin-Lopez, J. M. (2016). Effects of Florida Red Tides on histone variant expression and DNA methylation in the Eastern oyster *Crassostrea virginica*. In *7th Society of Environmental Toxicology and Chemistry World Congress*. Orlando, FL, USA.

33. Suarez-Ulloa, V. (Graduate_Student), & Eirin-Lopez, J. M. (2016). Enhancing the analysis of the transcriptomic response of mussels to Harmful Algal Blooms using network-inspired approaches. In *Emory Exosome Summer Course*. Atlanta, GA, USA.

32. Aguiar-Pulido, V., Suarez-Ulloa, V. (Graduate_Student), Eirin-Lopez, J. M., & Narasimhan, G. (2016). Network-inspired approaches for transcriptomic analyses. In *International Work-Conference on Bioinformatics and Biomedical Engineering*. Granada, Spain.
31. Rodriguez-Casariago, J. (Graduate_Student), & Eirin-Lopez, J. M. (2016). Epigenetic modifications in response to environmental stressors on Eastern oyster (*Crassostrea virginica*): Preliminary results of the exposure to a simulated Florida Red Tide. In *FIU Biosymposium*. Miami FL, USA.
30. Suarez-Ulloa, V. (Graduate_Student), & Eirin-Lopez, J. M. (2016). Framing epigenetic signatures of the Pacific oyster under environmental stress using network analysis. In *FIU Biosymposium*. Miami FL, USA.
29. Eirin-Lopez, J. M. (2015). The first in vivo characterization of macroH2A beyond vertebrates provides new insights into the functional evolution of histone variants. In *Asilomar Chromatin and Chromosomes Conference*. Asilomar, CA, USA.
28. Eirin-Lopez, J. M. (2015). Environmental epigenetic responses in marine invertebrates. In *Marine Science Seminar Series, Department of Biological Sciences, Florida International University*. Miami FL, USA.
27. Eirin-Lopez, J. M., & Suarez-Ulloa, V. (Graduate_Student). (2015). Framing epigenetic signatures of the Pacific oyster under environmental stress using network analysis. In *Asilomar Chromatin and Chromosomes Conference*. Asilomar, CA, USA.
26. Gonzalez-Romero, R. (Postdoc), & Eirin-Lopez, J. M. (2015). Characterization of epigenetic marks in marine invertebrates. In *Asilomar Chromatin and Chromosomes Conference*. Asilomar, CA, USA.
25. Eirin-Lopez, J. M. (2015). First in vivo characterization of macroH2A beyond vertebrates: new insights into the functional evolution of histone variants. In *Gordon Research Conference on Epigenetics*. Bentley University. Waltham, MA, USA.
24. Suarez-Ulloa, V. (Graduate_Student), & Eirin-Lopez, J. M. (2015). Environmental epigenetics, a venue for developing next-generation biomarkers of marine pollution. In *FIU Biosymposium*. Miami FL, USA.
23. Gonzalez-Romero, R. (Postdoc), & Eirin-Lopez, J. M. (2014). Characterization of histone variants in bivalve molluscs and their relevance in the development of chromatin-based tests for evaluating okadaic acid genotoxicity in the marine environment. In *Asilomar Chromatin and Chromosomes Conference*. Asilomar CA, USA.
22. Eirin-Lopez, J. M., & Suarez-Ulloa, V. (Graduate_Student). (2014). Environmental epigenetics in bivalves: applications for biomonitoring. In *Asilomar Chromatin and Chromosomes Conference*. Asilomar, CA, USA.
21. Suarez-Ulloa, V. (Graduate_Student), & Eirin-Lopez, J. M. (2014). CHROMEVALOdb: a data mining approach to the study of the chromatin in bivalves. In *FIU Biosymposium*. Miami FL, USA.
20. Eirin-Lopez, J. M. (2013). Epigenetic insights into the adaptive response of bivalve molluscs to marine biotoxins. In *Marine Science Seminar Series, Department of Biological Sciences, Florida International University*. Miami FL, USA.
19. Eirin-Lopez, J. M., & Suarez-Ulloa, V. (Graduate_Student). (2013). Clustering of gene expression profiles applied to marine research. In *International Work Conference on Artificial and Neural Networks (IWANN)*. Tenerife, Spain.
18. Eirin-Lopez, J. M. (2013). Unmasking chromatin evolution: organismal complexity and adaptive response to changing environments. In *Department of Biological Sciences, Florida International University*. Miami FL,

USA.

17. Eirin-Lopez, J. M. (2012). Histones; evolution of key players for DNA packing and metabolism in chromatin. In *Department of Genetics, University of Granada*. Granada, Spain.
16. Eirin-Lopez, J. M. (2011). Histones, key players in DNA packaging and function within the cell nucleus. In *Congress of the Spanish Society of Evolutionary Biology (SESBE)*. Madrid, Spain.
15. Eirin-Lopez, J. M., & Suarez-Ulloa, V. (Graduate_Student). (2011). Development of a database of chromatin-associated genotoxicity biomarkers. In *3rd Meeting of the Galician Bioinformatics Network*. Vigo, Spain.
14. Eirin-Lopez, J. M. (2010). Histones in regalia: flourishing diversity on the verge of germ chromatin evolution. In *Joint Annual Meeting of the Society for the Study of Evolution (SSE), The Society of Systematic Biologists (SSB), and the American Society of Naturalists (ASN)*. Portland, OR, USA.
13. Eirin-Lopez, J. M. (2009). Electrostatic properties of chromosomal proteins and impact on chromatin dynamics. In *2nd Meeting of the Galician Bioinformatics Network*. Santiago de Compostela, Spain.
12. Eirin-Lopez, J. M. (2009). Ligand diversity and biological roles for carbohydrate-binding modules: a molecular evolutionary perspective. In *National Center of Biotechnology, Spanish Research Council*. Madrid, Spain.
11. Eirin-Lopez, J. M. (2009). Origin and evolution of sperm nuclear basic proteins. In *National Museum of Natural Sciences, Spanish Research Council*. Madrid, Spain.
10. Eirin-Lopez, J. M. (2008). The sperm proteins from amphioxus mirror its basal position among chordates and redefine the origin of vertebrate protamines. In *13th Evolutionary Biology Meeting at Marseilles*. Marseilles, France.
9. Eirin-Lopez, J. M. (2008). Evolution of sperm nuclear basic proteins: effects on fertility and sperm competition. In *University of A Coruña Medical School*. A Coruña, Spain.
8. Eirin-Lopez, J. M., & Gonzalez-Romero, R. (Graduate_Student). (2008). Long-term evolution of the histone H2A family mediated by a birth-and-death process. In *13th Evolutionary Biology Meeting at Marseilles*. Marseilles, France.
7. Eirin-Lopez, J. M. (2008). Evolutionary origin of vertebrate protamines: new clues from cephalochordates and tunicates. In *Department of Biochemistry, Genetics and Immunology, University of Vigo*. Vigo, Spain.
6. Eirin-Lopez, J. M. (2006). Evolution and revolutions of nuclear chaperones in chromatin remodeling: the nucleophosmin/nucleoplasmin family. In *Asilomar Chromatin and Chromosomes Conference*. Asilomar, CA, USA.
5. Eirin-Lopez, J. M. (2006). The footloose histone H1 and the fancy-free sperm nuclear basic proteins: we are a happy family! In *Annual Meeting of the Society for Molecular Biology and Evolution (SMBE)*. Tempe, AZ, USA.
4. Eirin-Lopez, J. M. (2005). Histone H1 function and distribution in chromatin: what does molecular evolution tell us about it? In *Asilomar Chromatin and Chromosomes Conference*. Asilomar, CA, USA.
3. Eirin-Lopez, J. M. (2005). "Orphon" histones and the molecular evolution of the H1 multigene family. In *Department of Biochemistry and Microbiology, University of Victoria*. Victoria BC, Canada.

2. Eirin-Lopez, J. M. (2001). Molecular and evolutionary characterization of the histone gene family. In *BBSRC summer school on molecular evolution and diversity*. Edinburgh, United Kingdom.

1. Eirin-Lopez, J. M. (2001). Mussel *Mytilus* histone genes: possible evidence of an "orphan origin" for H1 histone genes. In *8th Congress of the European Society for Evolutionary Biology (ESEB)*. Aarhus, Denmark.

CREATIVE WORK

12. Guest Lecturer, The Epigenetics Revolution (2018) Broward College Seminar Series, Earth Day Celebrations, Pembroke Pines FL.

11. Guest Lecturer, Coral responses to global change: an epigenetic perspective (2017) Coral Reef Conservation Program Learning Exchange, Florida Department of Environmental Protection, Hollywood FL.

10. Media Interview, Harmful Algal Blooms in South Florida (2017) Vice News, Interview, Dissemination research and public information.

9. Media Interview, FIU experts discuss health issues caused by toxic algae (2016) FIU Student Media Report, information on Harmful Algal Bloom episodes caused by cyanobacteria in the Florida West Coast. <http://panthernow.com/2016/08/24/fiu-experts-discuss-health-issues-caused-by-toxic-algae>.

8. Media Interview, FIU experts explain toxic algae (2016) FIU The Beacon Newspaper, Interview vol. 28 issue 6, 08/22/2016.

7. Media Interview, 5 things to know about toxic algae (2016) FIU NEWS Report, information on Harmful Algal Bloom episodes caused by cyanobacteria in the Florida West Coast. <https://news.fiu.edu/2016/07/fiu-experts-on-toxic-algae/102050> <https://news.fiu.edu/2016/07/5-things-to-know-about-blue-green-algae/101991>.

6. Media Interview, Harmful Algal Blooms in South Florida (2016) Radio Caracol, information on Harmful Algal Bloom episodes caused by cyanobacteria in the Florida West Coast. http://www.caracol1260.com/escucha/archivo_de_audio/el-agua-del-lago-okeechobee-alimenta-la-proliferacion-de-algas-toxicas-oir/20160607/oir/3181214.aspx.

5. Media Interview, Harmful Algal Blooms in South Florida (2016) NOTICIAS WUFT, student run and produced radio show in Spanish that airs every Saturday through NPR-affiliate station 89.1 WUFT-F.M. Gainesville, FL.

4. Guest Lecturer, The Epigenetics revolution reaches the ocean (2016) Ocean Life Seminar Series, Key Largo, FL.

3. Community Initiative, Assistance to Upward Bound students to gather short nature films (90 seconds) for the museum's app in which visitors can learn about specific types of marine life we do not have on display (2015) Patricia & Phillip Frost Museum of Science, Miami FL.

2. Guest Lecturer, The Epigenetics revolution reaches the ocean (2016) Rookery Bay National Estuarine Research Reserve, Naples FL.

1. Guest Lecturer, Challenges for Latinos in the 21st Century (2013), Hispanic Heritage Foundation Leadership Symposium, Miami FL.

WORKS IN PROGRESS

Papers submitted to journals for consideration

4. Rodriguez-Casariago, J. (**Graduate_Student**), Shantz, A., Ladd, M., Ausio, J., Fourqurean, J. W., Burkepile, D., & Eirin-Lopez, J. M. (2018). Epigenetic responses to nutrient stress in the staghorn coral *Acropora cervicornis*. *PeerJ*. Submitted.
3. Suarez-Ulloa, V. (**Graduate_Student**), Aguiar-Pulido, V., Valdes, C., Narasimhan, G., & Eirin-Lopez, J. M. (2018). Common and unique patterns in the responses of the Pacific oyster to multiple stressors using transcriptomic data series. *BMC Genomics*. Submitted.
2. Suarez-Ulloa, V. (**Graduate_Student**), Rivera-Casas, C. (**Postdoc**), Michel, M., & Eirin-Lopez, J. M. (2018). Epigenetic variation in the flat tree oyster *Isognomon alatus* over a 2-year period in a mangrove ecosystem from North Biscayne Bay (North Miami, FL). *Frontiers in Marine Science*. *Invited Paper Submitted*.
1. Eirin-Lopez, J. M., & Putnam, H. (2018). Epigenetics of marine organisms. *Annual Review of Marine Science*. *Commissioned Paper Submitted*.

Other completed papers

N/A

Research in Progress

Many independent lines of research in progress, please see Research Statement for details.

Grant Proposals

National Science Foundation, *CAREER: Elucidating the role of histone modifications during epigenetic trans-generational responses to global change*. J. M. Eirin-Lopez (P.I.). 2018-2023. \$600,000 (all to FIU).

SeaWorld & Busch Gardens Conservation Fund, *Age estimation and characterization of pollution impact on marine mammals using epigenetic tools*. J. M. Eirin-Lopez (P.I.), A. Beal (Co-P.I.). 2018-2020. \$20,000 (all to FIU).

Save Our Seas Foundation, *Epigenetics as a new frontier to improve shark nursery conservation in Bimini (Bahamas)*. J. M. Eirin-Lopez (P.I.), A. Beal (Co-P.I.). 2018-2020. \$9,100 (all to FIU).

SeaWorld & Busch Gardens Conservation Fund, *Restoration of the staghorn coral in Puerto rico using physiological preconditioning strategies*. J. M. Eirin-Lopez (P.I.), J. Rodriguez-Casariago (Co-P.I.). 2018-2020. \$20,000 (all to FIU).

FIU Tropics Program, *Development of an epigenetic tool to age marine mammals*. A. Beal (P.I.), J. M. Eirin-Lopez (Co-P.I.). 2018-2019. \$10,000 (all to FIU).

FIU Tropics Program, *Development of epigenetic tools for coral restoration in Puerto Rico*. J. Rodriguez-Casariago (P.I.), J. M. Eirin-Lopez (Co-P.I.). 2018-2019. \$10,000 (all to FIU).

FUNDED RESEARCH

External

16. National Science Foundation, Division of Integrative Organismal Systems (IOS), *Interaction between genotype and acquired environmental modifications during coral responses to extreme climatic events*. J. M. Eirin-Lopez (P.I.), A. Sabat (Co-P.I.), I. Baums (Co-P.I.). 2017-2019. \$176,081, \$109,006 to FIU.

15. National Science Foundation, Division of Human Resource Development (HRD), *FIU-UPR partnership enhancement supplemental request*. T. Crowl (P.I.), J. M. Eirin-Lopez (Co-P.I.), R. Teutonico (Co-P.I.). 2017-2019. \$180,904 (all to FIU).
14. Ramon Areces Foundation, *Epigenetic characterization of marine invertebrates*. J. M. Eirin-Lopez (P.I.). 2016-2018. \$60,000 (all to FIU).
13. National Science Foundation, Division of Human Resource Development (HRD), *CREST Center for Environmental Aquatic Chemistry & Ecotoxicology*. T. Crowl (Program Coordinator), R. Teutonico (P.I.), R. Price (P.I.), M. Ross (P.I.), L. Kramer (P.I.), S. Graham (P.I.), S. Chen (P.I.), R. Jaffe (P.I.), Y. Cai (P.I.), P. Gardinali (P.I.), M. Rossi (P.I.), M. Cooke (P.I.), J. M. Eirin-Lopez (Co-Investigator). 2016-2020. \$4,000,000 (all to FIU).
12. Broward Shellfish Club, *Characterization of epigenetic modifications in oysters*. J. M. Eirin-Lopez (P.I.), M. Michel (Co-P.I.). 2017-2018. \$1,000 (all to FIU).
11. United States Department of Agriculture, National Shellfisheries Association, *Comparative Genomics Workshop Travel award to supervised Graduate Student (Victoria Suarez-Ulloa)*. J. M. Eirin-Lopez (student supervisor). 2017. \$1,000 (all to FIU).
10. Society of Environmental Toxicology and Chemistry, *Travel award to supervised Graduate Student (Victoria Suarez-Ulloa)*. J. M. Eirin-Lopez (student supervisor). 2016. \$400 (all to FIU).
9. Government of Spain Research Program, *Specialization imparted by histone variants H2A.X and H2A.Z to chromatin in bivalve molluscs: protostome evolution and genotoxicity tests*. J. M. Eirin-Lopez (P.I.). 2011-2014. \$125,000 (all to FIU).
8. Government of Spain Research Program, *Study of the specialization imparted by histone variants to chromatin in bivalves*. J. M. Eirin-Lopez (P.I.). 2009-2013. \$50,000 (pre-FIU).
7. Government of Spain Research Program, *"Ramon y Cajal" Fellowship*. J. M. Eirin-Lopez (P.I.). 2009-2013. \$140,000 (pre-FIU).
6. Government of Spain Research Program, *Study of the genotoxic effects of the marine biotoxin okadaic acid on mussel aquaculture industry*. J. Mendez (P.I.), J. M. Eirin-Lopez (Co-P.I.). 2008-2011. \$35,000 (pre-FIU).
5. Government of Spain Research Program, *"Isidro Parga Pondal" Fellowship*. J. M. Eirin-Lopez (P.I.). 2009. \$25,000 (pre-FIU).
4. Government of Spain Research Program, *Development of cytogenetic and molecular markers in the clam *Ruditapes decussatus* under environmental stress*. J. Mendez (P.I.), J. M. Eirin-Lopez (Co-P.I.). 2007-2010. \$20,000 (pre-FIU).
3. Government of Spain Research Program, *Identification of DNA markers in the clam *Venerupis pullastra* and application for genetic variability analysis and population structure*. A. Insua (P.I.), J. M. Eirin-Lopez (Co-P.I.). 2007-2010. \$18,000 (pre-FIU).
2. European Research Council, Marie Curie Program, *Molecular and evolutionary characterization histone variants: mechanisms involved in altered chromatin conformations arising from pathological states*. J. M. Eirin-Lopez (P.I.). 2006-2008. \$235,000 (pre-FIU).
1. Government of Spain Research Program, *Structural and chromosomal location of different genomic regions*

in the mussel Mytilus galloprovincialis. J. Mendez (P.I.), J. M. Eirin-Lopez (Co-P.I.). 2001-2004. \$15,000 (pre-FIU).

Internal

14. College Arts Sciences and Education and Dept. Biological Sciences, *Biosymposium Development Funds*. J. M. Eirin-Lopez (P.I.). 2017-2018. \$800.

13. FIU Tropics Program, *Epigenetics as a new frontier to improve shark nursery conservation in Bimini (Bahamas)*. A. Beal (P.I.), J. M. Eirin-Lopez (Co-P.I.). 2017-2018. \$1,000.

12. FIU Tropics Program, *Stress-hardening of reef corals: influence over microbiome, transcriptomic and epigenetic patterns*. J. Rodriguez-Casariego (P.I.), J. M. Eirin-Lopez (Co-P.I.). 2017-2018. \$3,000.

11. FIU UP:LIFT (University Paradigm: Learn, Interact, Facilitate, Transform) Course Reform Initiative, *Using network analysis of online and in-person majors Evolution courses to study challenges in an online BA program for Biological Sciences*. E. Bishop-Von Wettberg (P.I.), J. M. Eirin-Lopez (Co-P.I.), T. Collins (Co-P.I.), E. Brewe (Co-P.I.), Kristin Bishop-Von Wettberg (Co-P.I.). 2016-2017. \$32,599.

10. FIU University Graduate School, *Dissertation Year Fellowship to supervised Graduate Student (Victoria Suarez-Ulloa)*. J. M. Eirin-Lopez (student supervisor). 2017. \$16,000.

9. FIU University Graduate School, *Worlds Ahead Marine Sciences Seminar Series*. J. M. Eirin-Lopez (P.I.). 2017. \$6,000.

8. FIU University Graduate School, *Teaching Assistantship to supervised Graduate Student (Andria Beal)*. J. M. Eirin-Lopez (student supervisor). 2015-2019. \$93,840.

7. FIU University Graduate School, *Graduate Travel Funds to supervised Graduate Student (Victoria Suarez-Ulloa)*. J. M. Eirin-Lopez (student supervisor). 2016. \$600.

6. FIU University Graduate School, *Worlds Ahead Marine Sciences Seminar Series*. J. M. Eirin-Lopez (P.I.). 2016. \$6,000.

5. FIU University Graduate School, *Teaching Assistantship to supervised Graduate Student (Javier Rodriguez-Casariego)*. J. M. Eirin-Lopez (student supervisor). 2015-2019. \$93,840.

4. FIU Biomolecular Sciences Institute, *Pilot analysis of next-generation epigenetic biomarkers of brevetoxin exposure during Florida Red Tides in the Eastern Oyster and Bay Scallop*. J. M. Eirin-Lopez (P.I.), J. Berry (Co-P.I.). 2015-2016. \$10,000.

3. FIU University Graduate School, *Worlds Ahead Marine Sciences Seminar Series*. J. M. Eirin-Lopez (P.I.). 2015. \$6,000.

2. FIU Mass Spectrometry Facility, *Advance Mass Spectrometry Facility Rapid Access*. J. M. Eirin-Lopez (P.I.). 2014. \$250.

1. FIU University Graduate School, *Teaching Assistantship to supervised Graduate Student (Victoria Suarez-Ulloa)*. J. M. Eirin-Lopez (student supervisor). 2013-2017. \$93,840.

PROPOSALS SUBMITTED BUT NOT FUNDED

14. National Park Service, *Development of a microarray tool detecting early sulfide stress in the turtle grass*

- Thalassia testudinum* in Florida Bay. J. M. Eirin-Lopez (P.I.), J. Fourqurean (Co-P.I.), G. Rand (Co-P.I.), J. Campbell (Co-P.I.). 2018-2021. 254,998.
13. National Science Foundation, *Analyzing and modeling microbiome dynamics from multiomics time-series data*. G. Narasimhan (P.I.), J. M. Eirin-Lopez (Co-P.I.), K. Mathee (Co-P.I.). 2018-2021. \$753,000.
12. National Science Foundation, *CAREER: Elucidating the role of histone modifications during epigenetic trans-generational responses to marine toxins in oysters*. J. M. Eirin-Lopez (P.I.). 2018-2023. \$547,895.
11. United States Department of Agriculture, *Functional Annotation of the Oyster Genome*. H. Putnam (P.I.), J. M. Eirin-Lopez (Co-P.I.). 2018-2021. \$125,000.
10. Environmental Protection Agency, *Ecological and Health impact of HAB in South Florida as a function of Catchment and climate change: Hydrological, Biological and environmental assessments*. S. Setegn (P.I.), J. M. Eirin-Lopez (Co-P.I.), K. Rein (Co-P.I.). 2017-2020. \$785,787.
9. Mexico Research Agency CONACYT, *Epigenetic alterations in the Mayan octopus in response to thermal stress*. C. Rosas-Vazquez (P.I.), J. M. Eirin-Lopez (Co-P.I.). 2017-2020. \$230,000.
8. National Science Foundation, *How do nutrient and thermal stress affect epigenetic mechanisms involved in coral responses to global change?*. J. M. Eirin-Lopez (P.I.), D. Burkepile (Co-P.I.), S. Roberts (Co-P.I.). 2017-2020. \$669,300.
7. National Science Foundation, *Histone variants and their modifications as mechanisms mediating environmental responses in invertebrates*. J. M. Eirin-Lopez (P.I.). 2017-2020. \$644,950.
6. National Oceanic and Atmospheric Administration, *Development of a microarray-based diagnostic test of brevetoxin (PbTx) exposure and genotoxicity in Eastern oyster*. J. M. Eirin-Lopez (P.I.), J. Berry (Co-P.I.). 2016-2019. \$244,498.
5. National Oceanic and Atmospheric Administration, Aquaculture Research Program, *Biomarkers of Fish Exposure to Ciguatoxins Toward Development of Effective Monitoring Strategies in Marine Aquaculture*. J. Berry (P.I.), J. M. Eirin-Lopez (Co-P.I.), A. Robertson (Co-P.I.). 2016-2019. \$293,500.
4. National Science Foundation, *Next Generation Microbiome Analysis*. G. Narasimhan (P.I.), J. M. Eirin-Lopez (Co-P.I.), K. Mathee (Co-P.I.). 2016-2019. \$927,426.
3. National Oceanic and Atmospheric Administration. *Development of new biomonitoring methodologies to assess genotoxic effects of marine pollutants in bottlenose dolphin populations*. J. M. Eirin-Lopez (P.I.), M. Heithaus (Co-P.I.), G. Worthy (Co-P.I.), T. Daly-Engel (Co-P.I.), K. Das (Co-P.I.). 2015-2018. \$310,428.
2. Florida Institute of Oceanography, *Filling gaps and monitoring dolphins on the Florida panhandle*. G. Worthy (P.I.), J. M. Eirin-Lopez (Co-P.I.), M. Heithaus (Co-P.I.), T. Daly-Engel (Co-P.I.), K. Das (Co-P.I.). 2015-2018. \$299,472.
1. National Science Foundation, *Epigenetic regulation of environmental adaptive responses in invertebrates*. J. M. Eirin-Lopez (P.I.). 2015-2018. \$746,325.

PATENT DISCLOSURES, APPLICATIONS, AND AWARDS

N/A

PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS

Department

3. Honors Thesis Presentation Award to supervised undergraduate student Michelot Michel (2017).
2. Travel Award to supervised graduate student Victoria Suarez-Ulloa, Biology Graduate Student Association (2016).
1. Biosymposium Presentation Award to supervised graduate student Victoria Suarez-Ulloa (2014).

School/College

5. Teaching Award, College of Arts, Sciences and Education (2017).
4. Service Award to supervised undergraduate student Michelot Michel (2017).
3. Service Award to supervised undergraduate student Gabriel Diaz (2016).
2. Outstanding graduate student Award to supervised graduate student Victoria Suarez-Ulloa, Marine Educational and Research Initiative, Institute of Water and Environment (2016).
1. First peer-reviewed publication of the Marine Educational and Research Initiative, Institute of Water and Environment (2016)

University

6. Thank-a-Prof Program, Center for the Advancement of Teaching (2018).
5. McNair Fellowship to supervised undergraduate student Eliani Pena, Ronald E. McNair Foundation, FIU (2017)
4. Outstanding Student Life Award Finalist to supervised undergraduate student Michelot Michel (2017).
3. McNair Fellowship to supervised undergraduate student Gabriel Diaz, Ronald E. McNair Foundation, FIU (2016)
2. Dissertation Year Fellowship to supervised graduate student Victoria Suarez-Ulloa (2016).
1. Faculty Book Authors Recognition (2013).

External

15. Travel Award, 2018, Gordon Research Conference in Global Change
14. Travel Award, 2017, Gordon Research Conference in Marine Molecular Ecology
13. Ph.D. Dissertation Award to supervised graduate student Ciro Rivera-Casas, University of A Coruna, Spain (2016).
12. Travel Award to supervised graduate student Victoria Suarez-Ulloa, Society of Environmental Toxicology and Chemistry (SETAC, 2016).
11. Travel Award, 2015, Society for the Study of Evolution/NESCent

10. Travel Award, 2015, Gordon Research Conference in Epigenetics
9. I3 Research Excellence Award (tenure and promotion), Government of Spain (2014).
8. Sigma Xi elected Member, Sigma Xi (2014).
7. Ph.D. Dissertation Award to supervised graduate student Rodrigo Gonzalez-Romero, University of A Coruna, Spain (2012)
6. Outstanding Young Investigator Award, Spanish Society of Evolutionary Biology (2011).
5. "Ramon y Cajal" Fellowship, Government of Spain (2009-2013).
4. "Isidro Parga Pondal" Fellowship, Government of Spain (2008-2009).
3. Presentation Award to supervised graduate student (Rodrigo Gonzalez-Romero), 13th Evolutionary Biology Meeting at Marseilles, France (2008).
2. Marie Curie Outgoing International Fellowship, European Research Commission (2005-2008).
1. Visiting Scholarship to University of Tokyo, Government of Spain (2002).

OFFICES HELD IN PROFESSIONAL SOCIETIES

N/A

OTHER PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

Department

10. Faculty host visit Dr. Juan Ausio, Univ. Victoria (2017).
9. Biosymposium (Biology Research Symposium) Organizer (2017-present).
8. Faculty host visit Dr. Ruth Gates, Univ. Hawaii (2017).
7. Faculty host visit Dr. Steven Roberts, Univ. Washington (2016).
6. Faculty host visit Dr. Emily Monroe, William Patterson Univ. (2017).
5. Biosymposium (Biology Research Symposium) Judge (2014).
4. Graduate Committee member, 2014-today.
3. Graduate Student Appreciation Week Judge (2014).
2. Glaser Seminar co-host of Dr. Steven Henikoff (2014).
1. Marine Ecologist (x2) search committee member (2013-2015).

School/College

1. Marine Sciences Seminar Series Organizer (2013-2017).

University

5. FIU-MAST Academy Judge (2017).

4. Dive Control Board Committee Member (2015-present).

3. Founding Faculty STEM Transformation Institute (2015-present).

2. CambIO (Computational and Molecular Biology Interest Organization, FIU) Advisor (2014-2015).

1. FIU-FURC Florida Undergraduate Research Conference Reviewer (2014).

Editorial Service

6. Frontiers in Marine Science (Frontiers Media), Associate Editor (2017-present).

5. AgriGene (Elsevier), Executive Associate Editor (2015-present).

4. Environmental Epigenetics (Oxford University Press), Associate Editor (2015-present).

3. Toxins (MDPI), Associate Editor (2014-present).

2. Frontiers in Genetics (Frontiers Media), Reviews Editor (2012-present).

1. International Journal of Evolutionary Biology (Hidawi), Guest Editor (2010-2014).

Peer-review

AgriGene, Aquatic Toxicology, Biochimica et Biophysica Acta - Gene Regulatory Mechanisms, Bioessays, BMC Evolutionary Biology, BMC Genomics, BMC Molecular Biology, Briefings in Functional Genomics, Chemosphere, Chromosoma, Chromosome Research, Current Genomics, Current Pharmaceutical Analyses, Database, Environment International, Environmental Pollution, Environmental Science and Technology, Epigenomics, FASEB Journal, Frontiers in Ecology and Evolution, Frontiers in Genetics, Frontiers in Marine Science, Frontiers in Plant Science, Gene, Genetica, Genome, International Journal of Primatology, Journal of Molecular Evolution, Journal of Proteomics, Journal of Toxicology and Environmental Health, Mammalian Genome, Marine Drugs, Marine Environmental Research, Mobile DNA, Molecular Biology and Evolution, Molecular Biology Reports, Nature Climate Change, Nature Communications, Nature Scientific Reports, Nature Structural and Molecular Biology, Oecologia, Peer J, PLoS ONE, RNA, Toxins, Traffic.

Book review

3. Anthropogenic Environmental Contamination, Toxicology and Public Health, Elsevier (2016).

2. Chordate Origins and Evolution: The Molecular Evolutionary Road to Vertebrates. Noriyuki Satoh, Elsevier/Academic Press (2015).

1. Biological Science. 6 Ed. Freeman S., Pearson-Prentice Hall (2014).

Grant panels and review

National Science Foundation (MCB, IOS, 2015-present).

King Abdullah Univ. Science and Technology, Saudi Arabia (2017).
Texas Sea Grant (2017)
Research Growth Initiative (RGI) University of Wisconsin-Milwaukee, WI (2016).
Medical Research Council, United Kingdom (2016).
French National Research Agency, France (2016).
Foundation for Science and Technology, Portugal (2016).
National Agency of Science, Argentine (2016).
Biomolecular Sciences Institute, Florida International University (2016).
European Research Council, Belgium (2015).
National Science Center, Poland (2015).
Austrian Science Fund, Austria (2015).
Spanish Research Agency, Spain (2014).

Conference organization

6. Conference Organizing Committee, Asilomar Chromatin and Chromosomes Conference, Asilomar CA (2015-2017).
5. Conference Session Organizer and Chair, Society for Molecular Biology and Evolution, Dublin, Ireland (2012).
4. Conference Organizing Committee, 3rd Meeting of the Galician Bioinformatics Network, Vigo, Spain (2011).
3. Conference Session Chair, Society for the Study of Evolution, Portland OR (2009).
2. Conference Session Organizer and Chair, Society for Molecular Biology and Evolution, Iowa (2009).
1. Conference Session Chair, 13th Evolutionary Meeting at Marseilles, Marseilles, France (2008).