

**TENURE AND PROMOTION CURRICULUM VITAE  
OF  
JOSE M. EIRIN-LOPEZ, Dept. of BIOLOGICAL SCIENCES**

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**EDUCATION**

<b>Degree</b>	<b>Institution</b>	<b>Field</b>	<b>Dates</b>
Ph.D.	Univ. A Coruña, Spain	Biology	10/2001-01/2005
M.S.	Univ. A Coruña, Spain	Genetics	10/1999-06/2001
B.S. honors	Univ. A Coruña, Spain	Biology	10/1995-07/1999

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**FULL-TIME ACADEMIC EXPERIENCE**

<b>Institution</b>	<b>Rank</b>	<b>Field</b>	<b>Dates</b>
Florida International Univ.	Assistant Professor	Biology	08/2013-today
Univ. A Coruña, Spain	Assistant Professor	Biology	12/2009-07/2013
Univ. A Coruña, Spain	Senior Research Associate	Biology	01/2009-11/2009
Univ. Victoria, Canada	Research Associate	Biology	09/2005-12/2008

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**PART-TIME ACADEMIC EXPERIENCE**

<b>Institution</b>	<b>Rank</b>	<b>Field</b>	<b>Dates</b>
Univ. of Leon, Spain	Adjunct Professor	Genetics	01/2009-06/2009

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**EMPLOYMENT RECORD AT FIU**

<b>Rank</b>	<b>Dates</b>
Assistant Professor	08/2013-today

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**PUBLICATIONS IN DISCIPLINE**

<sup>e</sup> denotes equal contribution

\* denotes mentored student

\*\* denotes mentored postdoc

**Books**

2013 Eirin-Lopez, J.M. About Evolution: Keys to Understand How Our Genetic Material Evolves. University of A Coruna Press, Spain. ISBN: 9788497495479.

**Articles**

**h-index: 25, citations: 1,492 (source: Google Scholar)**

2016 Rivera-Casas C.\*, Gonzalez-Romero R.\*\*, Vizoso-Vazquez A., Cheema M., Cerdan M.E., Mendez J., Ausio J., and J.M. Eirin-Lopez. 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.

2016 Leung A., Cheema M., Gonzalez-Romero R.\*\*, Eirin-Lopez J.M., Ausio J., and Nelson C.J. Unique yeast histone sequences influence octamer and nucleosome stability. *FEBS Letters* 590:2629-2638.

2016 Rivera-Casas C.\*, Gonzalez-Romero R.\*\*, Cheema M., Ausio J., and J.M. Eirin-Lopez. The characterization of macroH2A beyond vertebrates supports an ancestral origin and conserved role for histone variants in chromatin. *Epigenetics* 11:415-425.

2016 Prego-Faraldo M.V.\*, Valdiglesias V., Laffon B., Mendez J. J.M. Eirin-Lopez. Early Genotoxic and Cytotoxic Effects of the Toxic Dinoflagellate *Prorocentrum lima* in the Mussel *Mytilus galloprovincialis*. *Toxins* 8(6).

2016 Rivera-Casas C.\*, Gonzalez-Romero R.\*\*, Cheema M., Ausio J., and J.M. Eirin-Lopez. The characterization of macroH2A beyond vertebrates supports an ancestral origin and conserved role for

- histone variants in chromatin. *Epigenetics* 11:415-425.
- 2015 Suarez-Ulloa, V.\*, Fernandez-Tajes, J., Aguiar-Pulido, V., Prego-Faraldo, M.V. \*, Florez-Barros, F., Sexto-Iglesias, A., Mendez, J. and Eirin-Lopez, J.M. Unbiased high-throughput characterization of mussel transcriptomic responses to sublethal concentrations of the biotoxin okadaic acid. *PeerJ* 3:e1429.
- 2015 Suarez-Ulloa, V.\*, Gonzalez-Romero, R.\*\* and Eirin-Lopez, J.M. Environmental epigenetics: a promising venue for developing next-generation pollution biomonitoring tools in marine invertebrates. *Marine Pollution Bulletin* 98:5-13.
- 2015 Ruiz, M.F., Alvarez, M., Eirin-Lopez, J.M., Sarno, F., Kremer, L., Barbero, J.L. and Sanchez, L. An unusual role for *doublesex* in sex determination in the dipteran *Sciara*. *Genetics* 200:1181-1199.
- 2015 Prego-Faraldo M.V.\*, Valdiglesias V., Laffon B., Eirin-Lopez J.M., and J. Mendez. 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* 78:814-824.
- 2015 Eirin-Lopez, J.M., and Sánchez, L. 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.
- 2015 González-Romero, R.<sup>c\*\*</sup>, Eirin-Lopez, J.M.<sup>c</sup>, and Ausió, J. Evolution of High Mobility Group Nucleosome-binding (HMGN) proteins and its implications for vertebrate chromatin specialization. *Molecular Biology and Evolution* 32:121-131.
- 2013 González-Romero, R.\*, Rivera-Casas, C.\*, Méndez, J., Eirin-Lopez, J.M., and Ausió, J. 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.
- 2013 Suarez-Ulloa, V.\*, Fernandez-Tajes, J., Manfrin, C., Gerdol, M., Venier, P. and Eirin-Lopez, J.M. Bivalve omics: state of the art and potential applications for the biomonitoring of harmful marine compounds. *Marine Drugs* 11:4370-4389.
- 2013 Prego-Faraldo M.V.\*, Valdiglesias V., Mendez J., and J.M. Eirin-Lopez. Okadaic acid meet and greet: an insight into detection methods, response strategies and genotoxic effects in marine invertebrates. *Marine Drugs* 11:2829-2845.
- 2013 Aguiar-Pulido, V., Suárez-Ulloa, V.\*, Rivero, D., Eirin-Lopez, J.M., and Dorado, J. Clustering of gene expression profiles applied to marine research. *IWANN 2013, Part I, Lecture Notes on Computer Science (LNCS)* 7902: 453–462.
- 2013 Civetta, A., Eirin-Lopez, J.M., Kulathinal, R.J., and Marshall, J.L. The evolution of sex-related traits and genes 2012. *International Journal of Evolutionary Biology*, 590769.
- 2013 Suarez-Ulloa, V.\*, Fernandez-Tajes, J., Aguiar-Pulido, V., Rivera-Casas, C.\*, Gonzalez-Romero, R.\*, Ausio, J., Mendez, J., Dorado, J. and Eirin-Lopez, J.M. 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, 830-841.
- 2013 Eirin-Lopez, J.M. A computer lab exploring evolutionary aspects of chromatin structure and dynamics for an undergraduate chromatin course. *Biochemistry and Molecular Biology Education* 41, 95-102.
- 2012 Finn, R., Ellard, K., Eirin-Lopez, J.M., and Ausio, J. Vertebrate nucleoplasmin and NASP: egg histone storage proteins with multiple chaperone activities. *FASEB Journal* 26, 4788-4804.
- 2012 Talbert, P.B., Ahmad, K., Almouzni, G., Ausio, J., Berger, F., Bhalla, P.L., Bonner, W.M., Chadwick, B.P., Eirin-Lopez, J.M., et al. A unified phylogeny-based nomenclature for histone variants. *Epigenetics and Chromatin* 5, 7.
- 2012 González-Romero, R.\*, Rivera-Casas, C.\*, Frehlick, L.J., Méndez, J., Ausió, J., and Eirin-Lopez, J.M. Histone H2A (H2A.X and H2A.Z) variants in molluscs: molecular characterization and potential implications for chromatin dynamics. *PLoS ONE* 7, e30006.
- 2012 Gonzalez-Romero, R.\*, Rivera-Casas, C.\*, Fernandez-Tajes, J., Ausio, J., Méndez, J., and Eirin-Lopez, J.M. Chromatin specialization in bivalve molluscs: a leap forward for the evaluation of okadaic acid genotoxicity in the marine environment. *Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology* 155, 175-181.

- 2011 Kasinsky, H.E., Eirin-Lopez, J.M., and Ausio, J. Protamines: structural complexity, evolution and chromatin patterning. *Protein and Peptide Letters* 18, 755-771.
- 2011 Eirin-Lopez, J.M., and Ausio, J. Boule and the evolutionary origin of metazoan gametogenesis: a grandpa's tale. *International Journal of Evolutionary Biology* 2011, 972457.
- 2011 Civetta, A., Eirin-Lopez, J.M., Kulathinal, R.J., and Marshall, J.L. The evolution of sex-related traits and genes. *International Journal of Evolutionary Biology*, 807218.
- 2010 Sarno, F., Ruiz, M.F., Eirin-Lopez, J.M., Perondini, A.L., Selivon, D., and Sanchez, L. The gene transformer-2 of *Anastrepha* fruit flies (Diptera, Tephritidae) and its evolution in insects. *BMC Evolutionary Biology* 10, 140.
- 2010 Ishibashi, T., Li, A., Eirin-Lopez, J.M., Zhao, M., Missiaen, K., Abbott, D.W., Meistrich, M.L., Hendzel, M.J., and Ausió, J. H2A.Bbd: An X-chromosome-encoded histone involved in mammalian spermiogenesis. *Nucleic Acids Research* 38, 1780-1789.
- 2010 González-Romero, R.\* , Rivera-Casas, C.\* , Ausió, J., Méndez, J., and Eirin-Lopez, J.M. Birth-and-death long-term evolution promotes histone H2B variant diversification in the male germinal cell line. *Molecular Biology and Evolution* 27, 1802-1812.
- 2010 Freire, R.\* , Arias, A., Insua, A., Méndez, J., and Eirin-Lopez, J.M. 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, 413-426.
- 2009 González-Romero, R.\* , Ausió, J., Méndez, J., and Eirin-Lopez, J.M. Histone genes of the razor clam *Solen marginatus* unveil new aspects of linker histone evolution in protostomes. *Genome* 52, 597-607.
- 2009 Eirin-Lopez, J.M., Gonzalez-Romero, R.\* , Dryhurst, D., Ishibashi, T., and Ausio, J. 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.
- 2009 Eirin-Lopez, J.M., and Ausió, J. Origin and evolution of chromosomal sperm proteins. *Bioessays* 31, 1062-1070.
- 2009 Dryhurst, D., Ishibashi, T., Rose, K.L., Eirin-Lopez, J.M., McDonald, D., Silva-Moreno, B., Veldhoen, N., Helbing, C.C., Hendzel, M.J., et al. Characterization of the histone H2A.Z-1 and H2A.Z-2 isoforms in vertebrates. *BMC Biology* 7, 86.
- 2008 González-Romero, R.\* , Méndez, J., Ausió, J., and Eirin-Lopez, J.M. Quickly evolving histones, nucleosome stability and chromatin folding: All about histone H2A.Bbd. *Gene* 413, 1-7.
- 2008 González-Romero, R.\* , Ausió, J., Méndez, J., and Eirin-Lopez, J.M. 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, 505-518.
- 2008 Eirin-Lopez, J.M., Ishibashi, T., and Ausió, J. H2A.Bbd: a quickly evolving hypervariable mammalian histone that destabilizes nucleosomes in an acetylation-independent way. *FASEB Journal* 22, 316-326.
- 2008 Eirin-Lopez, J.M., Frehlick, L.J., Chiva, M., Saperas, N., and Ausió, J. The sperm proteins from amphioxus mirror its basal position among chordates and redefine the origin of vertebrate protamines. *Molecular Biology and Evolution* 25, 1705-1713.
- 2008 Abbott, D.W.<sup>e</sup>, Eirin-Lopez, J.M.<sup>e</sup>, and Boraston, A.B. Insight into Ligand Diversity and Novel Biological Roles for Family 32 Carbohydrate Binding Modules. *Molecular Biology and Evolution* 25, 155-157.
- 2007 Ruiz, M.F., Milano, A., Salvemini, M., Eirin-Lopez, J.M., Perondini, A.L., Selivon, D., Polito, C., Saccone, G., and Sánchez, L. The gene transformer of *Anastrepha* fruit flies (Diptera, tephritidae) and its evolution in insects. *PLoS ONE* 2, e1239.
- 2007 Ruiz, M.F., Eirin-Lopez, J.M., Stefani, R.N., Perondini, A.L., Selivon, D., and Sanchez, L. The gene doublesex of *Anastrepha* fruit flies (Diptera, Tephritidae) and its evolution in insects. *Development Genes and Evolution* 217, 725-731.
- 2007 Frehlick, L.J., Eirin-Lopez, J.M., and Ausió, J. New insights into the nucleophosmin/nucleoplasmin family of nuclear chaperones. *Bioessays* 29, 49-59.
- 2007 Eirin-Lopez, J.M., and Ausió, J. Evolutions and revolutions of nuclear chaperones in chromatin remodeling: the nucleophosmin-nucleoplasmin family. *Biochemistry and Cell Biology* 85, 527.

- 2007 Eirin-Lopez, J.M., and Ausió, J. H2A.Z-mediated genome-wide chromatin specialization. *Current Genomics* 8, 59-66.
- 2006 Saperas, N., Chiva, M., Casas, M.T., Campos, J.L., Eirin-Lopez, J.M., Frehlick, L.J., Prieto, C., Subirana, J.A., and Ausió, J. A unique vertebrate histone H1-related protamine-like protein results in an unusual sperm chromatin organization. *FEBS Journal* 273, 4548-4561.
- 2006 Frehlick, L.J., Eirin-Lopez, J.M., Prado, A., Su, H.W., Kasinsky, H.E., and Ausió, J. Sperm nuclear basic proteins of two closely related species of Scorpaeniform fish (*Sebastes maliger*, *Sebastes* sp.) with different sexual reproduction and the evolution of fish protamines. *Journal of Experimental Zoology Part A: Comparative Experimental Biology* 305, 277-287.
- 2006 Frehlick, L.J., Eirin-Lopez, J.M., Jeffery, E.D., Hunt, D.F., and Ausio, J. The characterization of amphibian nucleoplasmins yields new insight into their role in sperm chromatin remodeling. *BMC Genomics* 7, 99.
- 2006 Eirin-Lopez, J.M., Lewis, J.D., Howe, L., and Ausió, J. Common phylogenetic origin of protamine-like (PL) proteins and histone H1: evidence from bivalve PL genes. *Molecular Biology and Evolution* 23, 1304-1317.
- 2006 Eirin-Lopez, J.M., Frehlick, L.J., and Ausió, J. Protamines, in the footsteps of linker histone evolution. *Journal of Biological Chemistry* 281, 1-4.
- 2006 Eirin-Lopez, J.M., Frehlick, L.J., and Ausio, J. Long-term evolution and functional diversification in the members of the nucleophosmin/nucleoplasmin family of nuclear chaperones. *Genetics* 173, 1835-1850.
- 2006 Eirin-Lopez, J.M., and Ausió, J. Histone H1 function and distribution in chromatin: what does molecular evolution tell us about it? *Biochemistry and Cell Biology* 84, 658.
- 2005 Li, A.<sup>c</sup>, Eirin-Lopez, J.M.<sup>c</sup>, and Ausió, J. (2005). H2AX: tailoring histone H2A for chromatin-dependent genomic integrity. *Biochemistry and Cell Biology* 83, 505-515.
- 2005 Eirin-Lopez, J.M., Ruiz, M.F., González-Tizón, A.M., Martínez, A., Ausió, J., Sánchez, L., and Méndez, J. 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.
- 2004 Serna, E., Gorab, E., Ruiz, M.F., Goday, C., Eirin-Lopez, J.M., and Sánchez, L. The gene Sex-lethal of the Sciaridae family (order Diptera, suborder Nematocera) and its phylogeny in dipteran insects. *Genetics* 168, 907-921.
- 2004 Eirin-Lopez, J.M., Ruiz, M.F., González-Tizón, A.M., Martínez, A., Sánchez, L., and Méndez, J. 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, 131-144.
- 2004 Eirin-Lopez, J.M., González-Tizón, A.M., Martínez, A., and Méndez, J. 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.
- 2002 Eirin-Lopez, J.M., González-Tizón, A.M., Martínez, A., and Méndez, J. 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, 272-283.

### Chapters in Books

- 2015 Aguiar-Pulido V., Suarez-Ulloa V.\*<sup>c</sup>, Eirin-Lopez J.M., Pereira J., and G. Narasimhan. Computational Methods in Epigenetics. In "*Personalized Epigenetics*", T. Tollefsbol, ed. (Elsevier), in press.
- 2012 Eirin-Lopez, J.M., Rebordinos, L., Rooney, A.P., and Rozas, J. The birth-and-death evolution of multigene families revisited. In "*Genome Dynamics*", M.A. Garrido-Ramos, ed. (Karger Publishers Switzerland), pp. 170-196.
- 2012 Rivera-Casas, C.\*<sup>c</sup>, Mendez, J., and Eirin-Lopez, J.M. "Insights into the Study of Chromatin in Molluscs: Structure and Molecular Evolution of Histones in Pectinids". EAE Press, Spain.
- 2009 Eirin-Lopez, J.M., González-Romero, R.\*<sup>c</sup>, Dryhurst, D., Méndez, J., and Ausió, J. Long-term evolution of histone families: old notions and new insights into their diversification mechanisms across eukaryotes. In "*Evolutionary Biology: Concept, Modeling, and Application*", P. Pontarotti, ed. (Berlin Heidelberg, Springer-Verlag), pp. 139-162.

- 2007 Ausió, J., Eirin-Lopez, J.M., and Frehlick, L.J. Evolution of vertebrate chromosomal sperm proteins: implications for fertility and sperm competition. In "*Spermatology*", E.R.S. Roldan, and M. Gomendio, eds. (Nottingham, Nottingham University Press), pp. 63-79.
- 2000 Eirin-Lopez, J.M. Molecular, phylogenetic and evolutionary study of histones H1 and H3: molecular markers in marine biology and aquaculture. In "*5th Meeting of Young Researchers*", X.d. Galicia, ed. (A Coruña), pp. 55-62.

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## PRESENTED PAPERS, AND LECTURES

- 2016 Eirin-Lopez, J.M. *Epigenetic responses to Florida Red Tides in the Eastern oyster Crassostrea virginica*. Society of Environmental Toxicology and Chemistry Conference. Orlando, FL, USA. November.
- 2015 Eirin-Lopez, J.M. *The first in vivo characterization of macroH2A beyond vertebrates provides new insights into the functional evolution of histone variants*. Asilomar Chromatin and Chromosomes Conference. Asilomar, CA, USA. December.
- 2015 Eirin-Lopez, J.M. *Environmental epigenetic responses in marine invertebrates*. Marine Sciences Seminar Series, Florida International University, Miami FL, United States. September.
- 2015 Eirin-Lopez, J.M. *First in vivo characterization of macroH2A beyond vertebrates: new insights into the functional evolution of histone variants*. Gordon Research Conference on Epigenetics. Bentley University, Waltham, MA, USA. August.
- 2014 Eirin-López, J.M. *Environmental epigenetics in bivalves: applications for biomonitoring*. Asilomar Chromatin and Chromosomes Conference. Asilomar, CA, USA. December.
- 2013 Eirin-López, J.M. *Epigenetic insights into the adaptive response of bivalve molluscs to marine biotoxins*. Marine Science Seminar Series, Department of Biological Sciences, Florida International University, Miami FL, United States. October.
- 2013 Eirin-López, J.M. *Unmasking chromatin evolution: organismal complexity and adaptive response to changing environments*. Department of Biological Sciences, Florida International University, Miami FL, United States. January.
- 2012 Eirin-López, J.M. *Histones; evolution of key players for DNA packing and metabolism in chromatin*. Department of Genetics, University of Granada, Granada, Spain. January.
- 2011 Eirin-López, J.M. *Histones, key players in DNA packaging and function within the cell nucleus*. Congress of the Spanish Society of Evolutionary Biology (SESBE). Madrid, Spain. November.
- 2011 Eirin-López, J.M., and Suárez-Ulloa, V. *Development of a database of chromatin-associated genotoxicity biomarkers*. 3rd Meeting of the Galician Bioinformatics Network. Vigo, Spain. September.
- 2010 Eirin-López, J.M. *Histones in regalia: flourishing diversity on the verge of germ chromatin evolution*. Institute of Evolutionary Biology, Universidad Pompeu-Fabra, Spanish Research Council, Barcelona, Spain. October.
- 2010 Eirin-López, J.M. *Characterization of H2A variants in the mollusc Mytilus galloprovincialis: chromatin specialization and relevance for the development of genotoxicity tests*. 19th Congress of the Spanish Society of Environmental Mutagenesis (SEMA). A Coruña, Spain. October.
- 2010 Eirin-López, J.M. *Histones in regalia: flourishing diversity on the verge of germ chromatin evolution*. 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. June.
- 2009 Eirin-López, J.M. *Electrostatic properties of chromosomal proteins and impact on chromatin dynamics*. 2nd Meeting of the Galician Bioinformatics Network. Santiago de Compostela, Spain. December.
- 2009 Eirin-López, J.M. *Ligand diversity and biological roles for carbohydrate-binding modules: a molecular evolutionary perspective*. National Center of Biotechnology, Spanish Research Council, Madrid, Spain. September.
- 2009 Eirin-López, J.M. *Origin and evolution of sperm nuclear basic proteins*. National Museum of Natural Sciences, Spanish Research Council, Madrid, Spain. September.
- 2008 Eirin-López, J.M. *The sperm proteins from amphioxus mirror its basal position among chordates and redefine the origin of vertebrate protamines*. 13th Evolutionary Biology Meeting at Marseilles, France. September.

- 2008 Eirin-López, J.M. *Evolutionary origin of vertebrate protamines: new clues from cephalochordates and tunicates*. Department of Biochemistry, Genetics and Immunology, University of Vigo, Vigo, Spain. June.
- 2008 Eirin-López, J.M. *Evolution of sperm nuclear basic proteins: effects on fertility and sperm competition*. University of A Coruña Medical School, A Coruña, Spain. April.
- 2006 Eirin-López, J.M., and Ausio, J. *Evolution and revolutions of nuclear chaperones in chromatin remodeling: the nucleophosmin/nucleoplasmin family*. Asilomar Chromatin and Chromosomes Conference. Asilomar, CA, USA. December.
- 2006 Eirin-López, J.M., and Ausio, J. *The footloose histone H1 and the fancy-free sperm nuclear basic proteins: we are a happy family!* Annual Meeting of the Society for Molecular Biology and Evolution (SMBE). Tempe, AZ, USA. May.
- 2005 Eirin-López, J.M., and Ausio, J. *Histone H1 function and distribution in chromatin: what does molecular evolution tell us about it?* Asilomar Chromatin and Chromosomes Conference. Asilomar, CA, USA. December.
- 2005 Eirin-López, J.M. *"Orphon" histones and the molecular evolution of the H1 multigene family*. Department of Biochemistry and Microbiology, University of Victoria, BC, Canada. September.
- 2002 Eirin-López, J.M. *Molecular and evolutionary characterization of the histone gene family*. BBSRC summer school on molecular evolution and diversity. Edinburgh, United Kingdom. July.
- 2001 Eirin-López, J.M. *Mussel Mytilus histone genes: possible evidence of an 'orphon origin' for H1 histone genes*. 8th Congress of the European Society for Evolutionary Biology (ESEB). Aarhus, Denmark. August.

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## FUNDED RESEARCH

- Jose M. Eirin-Lopez (PI), John Berry (co-PI). Advance Mass Spectrometry Facility Rapid Access. FIU Mass Spectrometry Facility. 07/2014-10/2014. \$250.
- Jose M. Eirin-Lopez (PI), John Berry (co-PI). Pilot analysis of next-generation epigenetic biomarkers of brevetoxin exposure during Florida Red Tides in the Eastern Oyster and Bay Scallop. Biomolecular Sciences Institute Funds. May 2015 - April 2016. \$10,000.
- Jose M. Eirin-Lopez (PI). Specialization imparted by histone variants H2A.X y H2A.Z to chromatin in bivalve molluscs: protostome evolution and genotoxicity tests. MICINN Spanish Government. 01/2011-12/2013. \$125,000.
- David Posada (PI), Jose M. Eirin-Lopez (co-PI) and other 15 co-PIs. Consolidation of the Galician Bioinformatics network. Spanish Government. 01/2011-12/2011. \$5,000.
- Blanca Laffon (PI), Josefina Mendez (co-PI), Jose M. Eirin-Lopez (co-PI). NanoLINEN – nanotoxicology link between india and european nations. European Research Council. 01/2010-12/2012. \$6,000.
- Jose M. Eirin-Lopez (PI). Study of the specialization imparted by histone variants to chromatin in bivalves. MICINN Spanish Government. 12/2009-11/2012. \$50,000.
- Jose M. Eirin-Lopez (PI). Study of the evolution of metazoan animals through the analysis of chromatin and the histone code. MICINN Spanish Government. 11/2009-10/2011. \$20,000.
- Josefina Mendez (PI), Jose M. Eirin-Lopez (co-PI). Study of the genotoxic effects of the marine biotoxin okadaic acid on mussel aquaculture industry. MICINN Spanish Government. 06/2008-05/2011. \$35,000.
- Josefina Mendez (PI), Jose M. Eirin-Lopez (co-PI). Development of cytogenetic and molecular markers in the clam *Ruditapes decussatus* under environmental stress. MICINN Spanish Government. 10/2007-09/2010. \$20,000.
- Ana Insua (PI), Jose M. Eirin-Lopez (co-PI). Identification of DNA markers in the clam *Venerupis pullastra* and application for genetic variability analysis and population structure. MICINN Spanish Government. 01/2006-12/2008. \$18,000.
- Jose M. Eirin-Lopez (PI). Molecular and evolutionary characterization histone variants: mechanisms involved in altered chromatin conformations arising from pathological states. European Research Council. 12/2005-11/2008. \$235,000.
- Josefina Mendez (PI), Jose M. Eirin-Lopez (co-PI). Structure and chromosomal location of different genomic regions in the mussel *Mytilus galloprovincialis*. MICINN Spanish Government. 06/2001-05/2004. \$15,000.

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## PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS

- 2014 I3 Research Excellency Award, Spanish Government.  
2014 Sigma Xi  
2012 Outstanding Ph.D. Award to a supervised student (Gonzalez-Romero, Rodrigo), University of A Coruña, Spain.  
2011 Outstanding Young Investigator Award, Spanish Society of Evolutionary Biology.  
2009 "Ramon y Cajal" competitive Fellowship, Spanish Ministry of Science, Spanish Research Program.  
2008 "Isidro Parga Pondal" competitive Fellowship, Regional Government of Galicia, Spain.  
2005 "Marie Curie" Outgoing International Fellowship (OIF), European Commission.  
2002 Visiting Fellowship, Otsuchi Marine Research Center, Ocean Research Institute, University of Tokyo (Japan).  
2000 FPU Ph.D. competitive Fellowship, Spanish Ministry of Science and Education.  
2000-12 Competitive grants supporting of travel and research, 8 awards (funded by the Spanish Government).

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## PROFESSIONAL ACTIVITIES

### Journal Reviewer

Bioessays, BMC Evolutionary Biology, BMC Genomics, BMC Molecular Biology, Briefings in Functional Genomics, Chromosome Research, Current Genomics, Current Pharmaceutical Analyses, Database, Environment International, FASEB Journal, Frontiers in Ecology and Evolution, Frontiers in Genetics, Gene, Genetica, Genome, International Journal of Primatology, Journal of Molecular Evolution, Journal of Toxicology and Environmental Health, Mammalian Genome, Marine Drugs, Mobile DNA, Molecular Biology and Evolution, Molecular Biology Reports, PLoS ONE, RNA, Traffic.

### Book Reviewer

Satoh, N. "*Chordate Origins and Evolution: The Molecular Evolutionary Road to Vertebrates*". Elsevier/Academic Press.

### Grant Reviewer

National Science Foundation (NSF), Research Growth Initiative (RGI) from The University of Wisconsin-Milwaukee, Texas Sea Grant, Marie Curie Actions European Research Council, French National Research Agency (ANR), Austrian Science Fund (FWF), Spanish National Research Agency (ANEP), Portuguese Science and Technology Foundation (FCT).

### Editorial Service

- 2015–present Editorial Board "Toxins", MDPI Press.  
2015–present Editorial Board "Environmental Epigenetics", Oxford University Press.  
2011–present Associate Editor "Frontiers in Genetics – Evolutionary and Population Genetics", Frontiers Media.  
2012–2013 Associate Editor "ISRN Evolutionary Biology", International Scholarly Research Network.  
2010–2014 Guest Associate Editor "International Journal of Evolutionary Biology", Hindawi Publishers.

### Congress and Meeting Organization

- 2015 Organizer "*Asilomar Chromatin, Chromosomes and Epigenetics Conference*", Pacific Grove, CA.  
2012 Organizer & Chair of the Symposium "*Gene Family Evolution*" in the 20th Annual Meeting of the Society for Molecular Biology and Evolution (SMBE), Dublin, Ireland.  
2011 Organizer of the 3rd Meeting of the Galician Bioinformatics Network, Vigo, Spain.  
2010 Chair of the session "*Molecular Evolution*" in the 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.

- 2009 Organizer & Chair of the Symposium "*Function and Evolution of Reproductive Proteins*" in the 17th Annual Meeting of the Society for Molecular Biology and Evolution (SMBE), Iowa City, IA, USA.
- 2008 Chair of the session "*Gene and Genome Evolution*" in the 13th Evolutionary Biology Meeting at Marseilles, Marseilles, France.

### **Member**

Society for Molecular Biology and Evolution (SMBE), The Society for the Study of Evolution (SSE), Sigma Xi, Marie Curie Alumni Association-European Research Council, Association of Marine Laboratories of the Caribbean (AMLC).

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## **PUBLIC SERVICE**

### **Departmental Service**

Member of Search Committee, Marine Ecologist, 2 Faculty positions (Fall 2014-Spring 2015).  
Member of the Graduate Committee (Fall 2014-today).  
Judge, Sixteenth Annual Biology Research Symposium, Department of Biological Sciences, Biscayne Bay Campus, FIU (Feb.1st, 2014).  
Member of Search Committee, Marine Ecologist Faculty position (Fall 2013-Spring 2014).

### **School/College**

Affiliated Faculty, Biomolecular Sciences Institute (BSI), School of Integrated Science and Humanity (Fall 2014-today).  
Co-Chair, Marine Science Seminar Series (2013-today).  
Co-Chair, Marine Science Seminar Student Series, funded by University Graduate School (2013-today).  
Affiliated Faculty, Latin American and Caribbean Center (LACC), School of International and Public Affairs (Fall 2013-today).  
Appointee, Graduate Faculty (Fall 2013-today).  
Appointee, Dissertation Advisor Status (Fall 2013-today).

### **University**

Member of FIU's Diving Control Board (Summer 2015-today).  
Founding Faculty Fellow, STEM Transformation Institute, Spring 2015.  
Judge, Grad Student Appreciation Week (oral presentations, Mar.31st, 2014).  
Reviewer, FIU-FURC Florida Undergraduate Research Conference (Dec.2013-Feb.2014)  
Coordination panel Graduate Studies in Marine Biology, University of A Coruna, Spain (Spring 2011-Spring 2013).

### **Public and Community**

Participant, NOAA Harmful Algal Bloom Forecast Stakeholder Meeting, Marathon Government Center (Marathon, FL) – Aug.15th, 2014.  
Invited Speaker, Hispanic Heritage Foundation STEM-LOFT Leadership Symposium, Florida International University, Nov.19th, 2013.

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## **OTHER**

### **Science Outreach and Press Releases**

- 2015 Eirin-Lopez, J.M. "Scientists unlock tangled mysteries of DNA". FIU News, March 06, 2015 (<http://news.fiu.edu/2015/03/fiu-scientists-unlock-tangled-mysteries-of-dna/85770>).
- 2012 Eirin-Lopez, J.M. "Epigenetics and evolution". *eEvolution* (journal of the Spanish Society of Evolutionary Biology, October, 6-9).
- 2012 Eirin-Lopez, J.M. SciLogs (<http://www.scilog.es>) "Molecular Evolution", Scientific Press, Spain.
- 2012 Different media. May 2012. A unified phylogeny-based nomenclature for histone variants (comment on the work by Talbert et al., 2012 Epigenet. Chromatin 5:7).

- 2011 González-Romero, R., J. Méndez, J. Ausió, and Eirin-Lopez, J.M. "The key role of histones". *Investigación y Ciencia* (Spanish edition of *Scientific American*, December, 36-43).
- 2011 Different media. Oct. J.M. Eirin-Lopez awarded Outstanding Young Researcher in Evolutionary Biology.
- 2008 Eirin-Lopez, J.M. Apr. "Research policies in Spain". Newspaper "La Voz de Galicia", Spain.
- 2008 Eirin-Lopez, J.M. Jan. "The first synthetic genome". Newspaper "La Opinión A Coruña", Spain.
- 2008 Eirin-Lopez, J.M. Jun. "Unlocking tangled secrets of the DNA molecule". eStrategies, United Kingdom.
- 2008 Nature Publishing Group & Functional Glycomics Gateway. Apr. 2008. Abbot, Eirín-López and Boraston (2008, *Mol. Biol. Evol.* 25:155-167) as an outstanding contribution to the study of carbohydrate binding molecules. Apr. 2008 (URL: <http://www.functionalglycomics.org/fg/update/2008/080410/full/fg.2008.18.shtml>).
- 2008 Vertical News (Canada). Apr. Characterization of the histone variant H2A.Bbd. (URL: <http://chemical-and-chemistry.verticalnews.com/articles/396551.html>).
- 2007 Eirin-Lopez, J.M. Dec. "Research at the University of A Coruña". TV Broadcast, CRTVG Spain.