

CURRICULUM VITAE

Jose M. Eirin-Lopez

Assistant Professor, Department of Biological Sciences, Florida International University.
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Education

January 2005	Ph.D. in Biology	University of A Coruña, A Coruña, Spain Dr. Josefina Méndez, advisor (Genetics, Marine Biology, Evolution)
June 2001	M.S. in Genetics	University of A Coruña, A Coruña, Spain
June 1999	B.S. in Biology (honors)	University of A Coruña, A Coruña, Spain

Research Interests

Marine Biology, Genotoxicology, Chromosomal Proteins, Reproduction, Molecular Evolution, Genomics, Adaptation.

Position and Employment

2013 - present	Assistant Professor & Principal Investigator (tenure-track position). Dept. Biological Sciences, Florida International University, Miami, United States of America.
2009/13	Assistant Professor & Principal Investigator (tenure-track position). Dept. Cellular and Molecular Biology, University of A Coruña, Spain.
2009	Adjunct Professor. Dept. Ecology, Genetics and Microbiology, University of Leon, Spain.
2006/08	Postdoctoral Researcher, Marie Curie Fellow. Dept. Biochemistry and Microbiology, University of Victoria, BC Canada. Advisor: Dr. Juan Ausio.
2005	Research Assistant. Dept. Biochemistry and Microbiology, University of Victoria, BC Canada.
2004	Visiting Scholar Center for Biological Investigations, Spanish Research Council, Madrid, Spain.
2000/04	Graduate student, Dept. Cellular and Molecular Biology, University of A Coruña, Spain.

Peer Reviewed Journal Publications

Web of Science h-index = 18; Google Scholar h-index = 20.

(PDF files available for personal use at my lab's website <http://chromevo1.com>)

- 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* in press.
- 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.*, [Eirin-Lopez, J.M.*](#), 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.*, [Eirin-Lopez, J.M.*](#), 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.

* denotes an equal contribution

Peer Reviewed Books and Book Chapter Publications

(PDF files available for personal use at my lab's website <http://chromevol.com>)

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

Grants

Principal Investigator

- 2011 MICINN, Spanish Research Program. *Specialization imparted by histone variants H2A.X y H2A.Z to chromatin in bivalve molluscs: protostome evolution and genotoxicity tests*. CGL201124812, 36 months, 125,000 \$.
- 2010 Regional Government of Galicia, Spain. *Study of the specialization imparted by histone variants to chromatin in bivalves*. 10PXIB103077PR, 36 months, 50,000 \$.
- 2009 MICINN, Spanish Research Program. *Study of the evolution of metazoan animals through the analysis of chromatin and the histone code*. RYC-2009-03856, 24 months, 20,000 \$.
- 2005 European Research Council. *Molecular and evolutionary characterization histone variants: mechanisms involved in altered chromatin conformations arising from pathological states*. MCA-OIF-021900, 36 months, 235,000 \$.

Postdoctoral/Associate Researcher

- 2010 European Research Council, ERA-NET. *NanoLINEN-Nanotoxicology link between India and European nations*. PIM2010ENI-00632, 24 months, 35,000 \$.
- 2010 Regional Government of Galicia, Spain. *Consolidation of the Galician Bioinformatics Network*. 2010-090, 24 months, 150,000 \$.
- 2008 Spanish Ministry of Science and Innovation, Spanish Research Program. *Study of the genotoxic effects of the marine biotoxin okadaic acid on mussel aquaculture industry*. AGL2008-05346-C02-01, 36 months, 150,000 \$.
- 2007 Regional Government of Galicia, Spain. *Development of cytogenetic and molecular markers in the clam *Ruditapes decussatus* under environmental stress*. 07MMA013103PR, 36 months, 122,000 \$.
- 2006 Regional Government of Galicia, Spain. *Identification of DNA markers in the clam *Venerupis pullastra* and application for genetic variability analysis and population structure*. PGIDIT06RMA50101PR, 36 months, 90,000 \$.
- 2005 National Science and Engineering Research Council, NSERC-Canada. *Chromatin and gene organization during spermatogenesis*. OGP0046399, 24 months, 50,000 \$.
- 2005 Canadian Institutes of Health Research, CIHR-Canada. *Role of linker histones, core histone variants, and their post-translational modifications in the folding of chromatin*. MOP57718, 36 months, 85,000 \$.

Graduate Student

- 2001 Regional Government of Galicia, Spain. *Structure and chromosomal location of different genomic regions in the mussel *Mytilus galloprovincialis**. PGIDT10PX110304PR, 36 months, 75,000 \$.

Honors and Awards

- 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 (<http://www.sesbe.org>).
 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.
 2000-2012 Competitive grants supporting of travel and research, 8 awards (funded by the Spanish Government).

Teaching Experience

University of A Coruña, A Coruña, Spain

B.S. in Biology- Majors

- 2007-present Co-lecturer: Introductory Genetics, Evolutionary and Population Genetics, Methods in Genetics.
 2000-2004 Teaching Assistant: Cytogenetics.

B.S. in Biology- Nonmajors

- 2007-present Lecturer: Introduction to Genomics, Evolutionary Genomics.

Master's Degree Program in Marine

- 2010-present Co-lecturer: Genetic Diversity.

Master's Degree Program in Advanced Biotechnology

- 2010-present Co-lecturer: Animal Biotechnology.
 2010-2011 Co-lecturer: Genomics.

Master's Degree Program in Molecular Biology and Genetics

- 2005-present Lecturer: Chromatin Structure and Dynamics.

University of León, León, Spain

Master's Degree Program in Molecular Biology and Biotechnology

- 2009 Lecturer: Chromatin Structure and Evolution.

Supervisory Experience

University of A Coruña, A Coruña, Spain

Graduate, Ph.D. Degree

- Prego, Verónica. 2012-present. *Marine Biology, Genetics, Toxicology*. Dept. Cellular and Molecular Biology.
 Suárez-Ulloa, Victoria. 2011-present. *Bioinformatics, Marine Biology, Toxicology*. Dept. Communication Technologies.
 Rivera-Casas, Ciro. 2010-present. *Marine Biology, Genetics, Toxicology*. University of A Coruña, Spain.
 Gonzalez-Romero, Rodrigo. 2007-2010. *Molecular Evolution, Marine Biology, Genetics*. University of A Coruña, Spain.

Graduate, M.S. Degree

- Rey, Alejandra. 2012-2013. *Marine Biology, Genetics, Toxicology*. Program in Molecular Biology and Genetics.
 Suárez-Ulloa, Victoria. 2010-2011. *Bioinformatics, Marine Biology, Toxicology*. Program in Bioinformatics.
 Rivera-Casas, Ciro. 2009-2010. *Molecular Evolution, Marine Biology*. Program in Molecular Biology and Genetics.

Undergraduate B.S. Degree

- Grandal, Marta. 2012-present. *Marine Biology, Genetics*. University of A Coruña, Spain.
 Varela, Marta. 2012-present. *Marine Biology, Genetics*. University of A Coruña, Spain.

Professional Service

Journal Reviewer (most frequent)

- Bioessays, BMC Evolutionary Biology, BMC Genomics, BMC Molecular Biology, Briefings in Functional Genomics, Current Genomics, Current Pharmaceutical Analyses, Database, FASEB Journal, Gene, Genetica, Genome, Journal of Molecular Evolution, Journal of Toxicology and Environmental Health, Mammalian Genome, Mobile DNA, Molecular Biology and Evolution, Molecular Biology Reports, PLoS ONE, RNA.

Grant Review

- 2013 Texas Sea Grant (TXSG)-NOAA, Texas A&M University, TX United States.
 2012 Agence Nationale de la Recherche-ANR (French National Research Agency), France.
 2011 Fonds zur Förderung der Wissenschaftlichen Forschung-FWF (Austrian Science Fund), Austria.
 2009, 2010 Agencia Nacional de Evaluación y Prospectiva-ANEP (Spanish National Research Agency), Spain.

Editorial Service

- 2012-2013 Associate Editor "ISRN Evolutionary Biology", International Scholarly Research Network.
 2011-present Associate Editor "Frontiers in Genetics – Evolutionary and Population Genetics", Frontiers Media.
 2010-present Guest Associate Editor "International Journal of Evolutionary Biology", Hindawi Publishers.

Congress and Meeting Organization

- 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.

Professional Memberships

Society for Molecular Biology and Evolution (SMBE), Spanish Society of Evolutionary Biology (SESBE), Spanish Society of Genetics (SEG).

Professional Workshops

- 2008 EMBO Course on Computational Biology. National Singapore University, Singapore. August 2008.
- 2006 Woods Hole Molecular Evolution Workshop. Marine Biological Laboratory, Woods Hole, MS, USA. July.
- 2003 DNA Phylogenies and Genealogies: Inference and Applications. University of Barcelona, Spain. July.
- 2002 BBSRC Summer School on Molecular Evolution and Diversity. University of Edinburgh, United Kingdom. June.

Invited Talks (most relevant)

- 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.
- 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.
- 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. *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.
- 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.

External Presentations and Seminars (most relevant)

- 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. *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.
- 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.
- 2006 Eirin-López, J.M., and Ausio, J. *Evolution and revolutions of nuclear chaperones in chromatin remodeling: the nucleophosmin/nucleoplamin 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.
- 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.

Science Outreach and Press Releases

- 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. The project "CHROMATINMOLEVOL", eStrategies, United Kingdom.
- 2008 Nature Publishing Group & Functional Glycomics Gateway. Apr. 2008. Abbot, Eirin-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.