

# Elena Lopez Peredo, Ph.D.

Research Scientist  
The Ecosystems Center  
Marine Biological Laboratory  
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THE UNIVERSITY OF CHICAGO  
**MARINE BIOLOGICAL  
LABORATORY**

## RESEARCH INTERESTS

My research is focused on adaptations associated with shifts between terrestrial and aquatic lifestyles during plant evolution. I am broadly interested in the genetic basis of physiological traits that evolve under radically different environmental conditions upon colonization of new ecosystems. Because internal and external microbial communities are invariably intertwined with plants in natural environments, I am also interested in the broader consequences of the movements of plants and their associated microbiomes between habitats, whether transitions between emerged and submerged environments, or introductions of non-native plants to new locations.

## EDUCATION

### University of Oviedo (Spain)

Sept 2008 **Ph.D. in Biology**-- Thesis: (Epi)genetic stability of *Humulus lupulus* after *in vitro* procedures. Graded with honors. Advisors: Dr. Angeles Revilla Bahillo and Dr. Rosa Arroyo-Garcia.

Jun 2004 **MSc in Biology**-- Thesis: Evaluation of microsatellite genotyping in hops using autoradiography detection and capillary electrophoresis. Graded with honors.

Sept 2002 **Bachelor in Biology**-- Major in Genetics and Biotechnology/Minor in Botany.

## APPOINTMENTS

### University of Chicago/Marine Biological Laboratory (USA)

2019- present **Instructor/ Visiting Lecturer/Course Director**. Instructor of the University of Chicago course at the Marine Biological Laboratory 'Microbiomes across Environments' (BIOS 27720, 1 credit- 100 class hours). Level, undergraduate.

### Marine Biological Laboratory (USA)

2018- **Research Scientist**. The Ecosystems Center. Supervisor: Dr. Zoe Cardon (MBL). Projects: (1) Genomic basis of the evolution of desiccation tolerance mechanisms in desert green algae (comparative genomics) (2) Symbiotic relationships of cordon-grass and sulfur-cycling bacteria in salt-marshes (*in vitro* culturing, metagenomics).

2015-2018 **Research Associate**. The Ecosystems Center. Supervisor: Dr. Zoe Cardon (MBL). Projects: (1) Genetic basis of desiccation tolerance mechanisms in desert green algae (comparative transcriptomics) (2) Cell division in green microalgae (confocal microscopy) (3) Microbiome in invasive red algae (amplicon sequencing).

2014-2015 **Postdoctoral Scientist**. The Ecosystems Center. Supervisor: Dr. Zoe Cardon (MBL). Projects: (1) Genetic basis of photoprotective mechanisms in desert green algae (transcriptomics).

2012-2013 **Visiting & Postdoctoral Researcher**. Josephine Bay Paul Center. Supervisors: Dr. Sheri Simmons (MBL) and Dr. Paul Turner (Yale). Projects: (1) Imaging phyllosphere bacterial communities using leaf-FISH (confocal microscopy) and (2) phage dynamics in clover phyllosphere (viral metagenomics).

### University of Connecticut (USA)

2010-2012 **Fulbright Postdoctoral Scholar**. Dept. Ecology & Evolutionary Biology. Supervisor: Dr. Don Les. Projects: (1) Phylogeography of the aquatic monocot *Najas* and (2) chloroplast genome sequencing in *Najas flexilis* (genomics).

### University of Oviedo (Spain)

2008-2010 **Researcher**, Dpto. Biología de Organismos y Sistemas. Fisiología Vegetal. Supervisor: Dr. Marigel Revilla Bahillo. Projects: (1) Genetic diversity in ferns and (2) Genetic assessment and conservation strategies for endemic plant species.

2003-2008 **Pre-doctoral candidate/Researcher**. Dpto. Biología de Organismos y Sistemas. Fisiología Vegetal. Supervisor: Dr. Marigel Revilla Bahillo. Projects: (1) Somaclonal genetic and epigenetic variation during *in vitro* culture of commercial crops.

### University of St. Andrews (Scotland)

2006 **Visiting Researcher**, University of St Andrews (Scotland). Centre for Evolution, Genes and Genomics. Supervisor: Dr. Richard Abbott Project: (1) Genetic diversity in *Senecio boissieri* populations.

### FELLOWSHIPS AND GRANTS

2022 (under review) **NSF-EDGE FGT**: Functional genomic tools for terrestrial and aquatic species in the Scenedesmaceae, to broaden genotype-phenotype studies in non-model green algae (Peredo as PI).

2020 **Los Alamos National Lab**. Support for augmentation of ongoing projects in algal genomics. Gene regulation during desiccation in desert-evolved microalgae. (Peredo as PI).

2020 **The Microbiome Center's Pilot Projects 2.0**. "Desiccation Tolerance in Green Algae from Desert Microbiotic Crust Microbiomes" - (\$20 000 PI Z Cardon, Peredo as Co-PI). <https://microbiome.uchicago.edu/news/announcing-funded-proposals-pilot-projects-20>

2020 **Gordon and Betty Moore Foundation**. Symbiosis in Aquatic Systems Initiative: symbiosis model systems (SMS). (\$300 000, PI Z. Cardon, Peredo as Co-PI)

2017 **University of Chicago & MBL Microeco** "From Corals to Coast". Seed money founding preliminary data generation on *Gracilaria* microbiome (\$54 600).

2016 **Community Science Program 2017**. Protecting photosynthesis during desiccation: do the genomes of desert-derived and aquatic *Scenedesmus* species hold the key to understanding extreme desiccation tolerance among green algae? Collaboration with Joint Genome Institute (DOE US) to generate annotated genomes of four green algae taxa (Peredo as PI). <https://jgi.doe.gov/desiccation-tolerance-among-green-algae>

2013 **Open Access Author Fund from the University of Connecticut**. Scholarship to cover publication costs on PLoS One (\$1250).

2010-2012 **Fulbright Foundation and Spanish Ministry of Education Postdoctoral Fellowship, Core Fulbright Visiting Scholar Program** Full salary plus benefits, 24 months (\$45 000/year).

2003-2007 **FPU Predoctoral fellowship, Spanish Ministry of Education**

Full salary plus benefits. Grad school tuition, 48 months (\$25 000/year).

2006 **FPU Predoctoral Visiting Scientist Support, Spanish Ministry of Education** Four months of financial support for specific research at a foreign institution (U. St Andrews).

### PUBLICATIONS

Perez Castro S\*, **Peredo EL\***... Z Cardon. Vegetated salt marsh sediments reveal the uncultivated diversity of sulfur-cycling bacteria (Submission expected March 2022)

**Peredo EL**, J. Stark, Z Cardon. Effect of nutrient deficit in the microbial communities of native and invasive *Gracilaria* species (in prep)

Peer-reviewed scientific journals:

Cardon Z., **Peredo EL**, Enloe C, Oakey J, Wu S-Z, Bezanilla M. (submitted) Slip slidin' away: bristle-driven gliding by *Tetradesmus deserticola* (Chlorophyta) in microfluidic chambers"

- Peredo EL, Cardon Z. (2020) Shared upregulation and contrasting downregulation of gene expression distinguish desiccation tolerant from intolerant green algae. *PNAS* 117 (29) 17438-17445 <https://www.pnas.org/content/117/29/17438>
- Stark J, Cardon Z, Peredo EL. (2020) Extraction of high-quality, high molecular-weight DNA depends heavily on cell homogenization methods in green microalgae. *Apps in Plant Sci*, 8: e11333. <https://bsapubs.onlinelibrary.wiley.com/doi/full/10.1002/aps3.11333>
- Bono L, RJ Orton, EL Peredo, HG Morrison, M Siström, SL Simmons, PE Turner. (2019) Spatiotemporal dynamics of RNA viruses associated with white clover (*Trifolium repens* L.) bioRxiv <https://doi.org/10.1101/772475>
- Cardon Z, EL Peredo, Dohnalkova AC, H Gershon, M Bezanilla. (2018) A model suite of green algae within the Scenedesmeaceae for investigating contrasting desiccation tolerance and morphology. *Journal of Cell Biology* 131 pii: jcs212233. <https://doi.org/10.1242/jcs.212233> Selected for highlights section of the Journal and for cover image. <http://jcs.biologists.org/content/131/7.cover-expansion>
- Peredo EL, SL Simmons. (2018) Leaf-FISH: Microscale imaging of microbial communities on phyllosphere. *Frontiers of Microbiology* 8: 1-14. <https://doi.org/10.3389/fmicb.2017.02669>
- Les DH, EL Peredo, N Tippery, L Benoit, H Razifard, U King, H Na, H Choi, L Chen, R Shannon, S Sheldon, (2015) *Najas minor* (Hydrocharitaceae) in North America: a reappraisal. *Aquatic Bot* 126:60-72. <https://doi.org/10.1016/j.aquabot.2015.06.005>
- Tippery NP, DH Les, EL Peredo. (2015) *Nymphoides grayana* (Menyanthaceae) in Florida verified by DNA and morphological data. *J Torrey Bot Soc* 142:325-330. <https://doi.org/10.3159/TORREY-D-15-00008.1>
- Les DH, AM Les, EL Peredo. (2015) *Najas flexilis* (Hydrocharitaceae) in Alaska: a reassessment. *Rhodora* 117:354-370. <https://doi.org/10.3119/15-03>
- Les DH, EL Peredo, U King, L Benoit, NP Tippery, C Ball, R Shannon. (2015) Through thick and thin: cryptic sympatric speciation in the submersed genus *Najas* (Hydrocharitaceae). *Mol Phylog and Evol* 82: 15-30. <https://doi.org/10.1016/j.ympev.2014.09.022>
- Peredo EL, U King, D Les. (2013) The plastid genome *Najas flexilis*: adaptation to submerged environments lead to the complete loss of the ndh complex in an aquatic angiosperms. *Plos One* 8: e68591 <https://doi.org/10.1371/journal.pone.0068591>
- Les DH, EL Peredo, L Benoit, N Tippery, U King, S Sheldon. (2013) Phytogeography of *Najas gracillima* (Hydrocharitaceae) in North America and its cryptic introduction to California. *Am J of Bot* 100:1905-15 <https://doi.org/10.3732/ajb.1300005>
- Peredo EL, Mendez-Couz M, Revilla MA (2013) Mating system in *Blechnum spicant* and *Dryopteris affinis* ssp. *affinis* correlates with genetic variability. *American Fern J* 103:27-39. <https://doi.org/10.1640/0002-8444-103.1.27>
- Peredo EL, D Les, U King, L Benoit. (2012) Extreme conservation of the *psaA/psaB* intercistronic spacer reveals a translational motif coincident with the evolution of land plants. *J Mol Evol* 75:184-197. <https://doi.org/10.1007/s00239-012-9526-z>
- Peredo EL, A Revilla, B Reed, B Javornik, R Arroyo-García (2010) The influence of the European and American wild germplasm in hop cultivars. *Gen Res Crop Evol*, 57: 575-586. <https://doi.org/10.1007/s10722-009-9495-2>
- Cires E, C Cuesta, EL Peredo, A Revilla, JA Fernández Prieto. (2010) Genome size variation and morphological differentiation within *Ranunculus parnassifolius* group (Ranunculaceae) from calcareous scree in the Northwest of Spain. *Plant Sys Evol*, 281: 193-208 <https://doi.org/10.1007/s00606-009-0201-9>
- Peredo EL, A Revilla, B Jiménez-Alfaro, A Bueno, J Fernández Prieto, R Abbott (2009) Historical biogeography of a disjunctly distributed, Spanish alpine plant, *Senecio boissieri* (Asteraceae). *Taxon*, 58: 883-892.

Peredo EL, R Arroyo-García, A Revilla. (2009) Epigenetic changes detected in micropropagated hop plants. *J Plant Physiol*, 166: 1101–1111. <https://doi.org/10.1016/j.jplph.2008.12.015>

Peredo EL, Revilla MA, Jimenez-Alfaro B, Bueno A, Cires E, Fernandez Prieto JA, Abbott R (2009) Applications of molecular markers prior conservation actions on the Spanish endemic *Senecio boissieri*. *Cryoletters* 30: 382–97. Pp 391.

Peredo EL, R Arroyo-García, B Reed, A Revilla. (2008) Genetic and epigenetic stability of cryopreserved and cold-stored hops (*Humulus lupulus* L.) *Cryobiology* 57:234–241. <https://doi.org/10.1016/j.cryobiol.2008.09.002>

Folgado R, Y Enai, EL Peredo, H Fernández, A Revilla (2007) Genetic stability of in vitro conserved germplasm of *Humulus lupulus* L. *Cryoletters* 29: 73–88. Pp 87.

Peredo EL, A Revilla, R Arroyo-García (2006) Assessment of genetic and epigenetic variation in hop plants regenerated from sequential subcultures of organogenic calli. *J Plant Physiol* 163: 1071–1079. <https://doi.org/10.1016/j.jplph.2005.09.010>

Peredo EL, R Arroyo-García, JM Martínez-Zapater, A Revilla (2005) Evaluation of microsatellite detection using autoradiography and capillary electrophoresis in hops. *J Am Soc Brew Chem* 63: 57–62.

#### Book chapters:

Peredo EL, SL Simmons (2021) Leaf-FISH: *in situ* hybridization method for visualizing bacterial taxa on plant surfaces. In “An overview of FISH concepts and protocols for microbial cells”, N. Azevedo and C. Almeida eds. *Methods in Molecular Biology*, (Springer Nature) [https://experiments.springernature.com/articles/10.1007/978-1-0716-1115-9\\_8](https://experiments.springernature.com/articles/10.1007/978-1-0716-1115-9_8)

King U, DH Les, EL Peredo, L Benoit (2017) Adaptive evolution of the chloroplast genome in the submersed Monocotyledon *Najas* (Hydrocharitaceae). In: Lisa Campbell, Davis JI, Meerow AW, Robert F. C. Naczi, Stevenson DW, Thomas WW, eds. *Diversity and Phylogeny of the Monocotyledons: Contributions from Monocots V* (Memoirs of The New York Botanical Garden Volume 118). NYBG Press, 52–68.

Peredo EL, A Revilla, M Méndez, V Menéndez, H Fernández. Diversity in natural fern populations: dominant markers as a genetic tool. Chapter 16 in book, *Working with ferns: Issues and Applications*. Editors: Kumar A & H Fernández, 2010, XXII, 386 p.

Menéndez V, A Revilla, EL Peredo, A Revilla, H Fernández. Sexual reproduction in ferns. Chapter 4 in book, *Working with ferns: Issues and Applications*. Eds: Kumar A & H Fernández, 2010, XXII, 386 p.

#### PROFESSIONAL SERVICE AND MEMBERSHIPS

Ad Hoc Reviewer for: *NSF Division of Molecular and Cellular Biosciences* (2017, 2018).

NSF IOS panelist. *Integrative Ecological Physiology Program* (2020).

Editor for *Hydrobiology* (Research Topic- expected 2021)

Invited Reviewer for: *Molecular Biology and Evolution, Ecology, Environmental Microbiology, Molecular Ecology, Taxon, Biological Journal of the Linnean Society, New Phytologist, American Journal of Botany, Aquatic Botany, International Journal of Plant Science, Journal of Phycology, Advances in Space Research, Plant Cell Reports, Electronic Journal of Biotechnology, Plant Cell, Tissue & Organ Culture.*

See <https://publons.com/author/1184869/elena-l-peredo#profile>

Member: Resident Scientists Representative at the Marine Biological Laboratory Community Council (since 2021)

Memberships: AAAS/Science, Botanical Society of America (BSA), The Society for Experimental Biology (SEB), Ecological Society of America (ESA), The Society for Integrative and Comparative Biology (SICB), European Society for Evolutionary Biology (ESEB), American Society for Microbiology (ASM), International Association of Plant Taxonomy (IAPT).



Organizer: MBL PostDoc Association (2016-2018 ), Spring Seminar Series 2015. The Ecosystems Center, Marine Biological Laboratory (MA, USA)

Invited participant (2017, 2018, 2019): MBL Microbiome Deep Dive Logan Science Journalism Program, (Microbiomes of Algae - A Roundtable Discussion—2017 & 2019, guided lab tours 2018).

## TEACHING EXPERIENCE

### UNDERGRADUATE TEACHING

2019- (recurrent appointment) **Instructor/Lecturer/Course Director**. Microbiomes Across Environments (BIOS 27720, 1 credit ~ 100 class hours) University of Chicago September course at Marine Biological Laboratory. Role; main instructor: (design classes and labs, mentor research projects).

2008 **Invited Speaker** - VIII Science and Technology week (University Oviedo, Spain)

2007 **Lecturer** - 'Conservation of plant resources' (University Oviedo, Spain)

2006 **Teaching Assistant** - 'Environmental Plant Physiology' and 'Phytopathology' (University Oviedo, Spain)

2005 **Lecturer-** 'Biotechnology applied to plant breeding and conservation' & 'Conservation and genetic characterization of plant resources' (University Oviedo, Spain)

### TEACHING CERTIFICATIONS

2017 Certified to Assistant Professor level by ANECA (Spanish Agency of Certification)

2004 Certified to High School level. Training (250h) in teaching Biological Sciences (Certificate of Pedagogical Aptitude, equivalent to master level).

### TEACHING OUTREACH

- Member of the Botanical Society of America Grad Student Research Award Committee (2021- on going).
- Judge of the Menzel Award at the Botany 2020 , 2021 meeting (Genetics section).
- Session moderator at the Botany 2020 meeting (Functional and Comparative Genomics I).
- Invited Panelist: "Scientific career paths" as part of the activities of the MBL Undergraduate Research Program Biological Discovery in Woods Hole REU (July 1<sup>st</sup>, 2019 in Woods Hole, Massachusetts)
- Poster presented at the Annual Woods Hole Science and Technology Education Partnership (WHSTEP) Liaison Dinner (November 7<sup>th</sup>, 2018 in Woods Hole, Massachusetts).
- Invited Poster Reviewer: 9th Annual MBL Undergraduate Research Symposium Program Biological Discovery in Woods Hole REU (August 16<sup>th</sup>, 2018 in Woods Hole, Massachusetts)
- Invited Speaker - High School Science Discovery Program at MBL. Adaptation and evolution in response to environmental challenges. (February 12th March 8<sup>th</sup>, 2022 in Woods Hole, Massachusetts)
- Invited Speaker: "Invite a scientist to lunch" as part of the activities of the MBL Undergraduate Research Program Biological Discovery in Woods Hole REU (July 17<sup>th</sup>, 2018 in Woods Hole, Massachusetts)

### MENTORING EXPERIENCE

#### University of Chicago - Marine Biological Laboratory

2019- on going Supervision of ~15 independent research projects part of the Microbiomes Across Environments, University of Chicago course. All projects are

presented in a public seminar. All projects include design, sample collection, NGS library prep and bioinformatic analysis.

### Marine Biological Laboratory

2020 - **remote mentoring**. Eli Ahiamadjie (Delaware State University) and Jaimy Jabon (Boston University). Metagenomic-based (16S) analysis of microbial communities associated to *Spartina* and sediments in salt-marshes in the East Coast (The Woods Hole Partnership Education Program (PEP))

2020 - **remote mentoring**. Scott Buresh (Boston University) and Alexis Correia (Bridgewater College). Amplicon-based (16S) analysis of microbial communities associated to *Spartina* and sediments in salt-marshes in the East Coast (internships founded by Blue Economy Internship Program)

2018 **Lauren Skinnion** - Student project at Semester in Environmental Science (SES). Project: Differential responses of invasive and native species of *Gracilaria* during uptake and recovery from salinity stress.

2018 **Ariela Buxbaum-Grice** - Student project at Semester in Environmental Science (SES). Project: A genetics-based study of *Gracilaria* species on Cape Cod

2017 **Lydia Fox** - Student project at Semester in Environmental Science (SES). Project: Salinity tolerances and Nitrogen requirements of native and invasive species of *Gracilaria*.

2017 **Lauren Hamm** - Student project at Semester in Environmental Science (SES). Project: Biogeography of *Gracilaria* species in Waquoit Bay. Award **Outstanding Research** in Biology at Rhodes College 2018. <http://www.rhodes.edu/stories/students-presented-departmental-awards-2017-18>

2016 **Hannah Gershone** - Student project at Semester in Environmental Science (SES). Project: Breaking the crust: finding desiccation tolerance in the phylogenetic tree.

2015 **Tinsley Galyean** - Student project at Semester in Environmental Science (SES). Project: Effects on of media definition on green algae microbiota.

2015 **Caroline Kanaskie**- Student project at Semester in Environmental Science (SES). Project: Effects of culturing conditions on photosynthetic abilities of green microalgae.

2014 **Alana Thurston** - Student project at Semester in Environmental Science (SES). Supervision on equipment use (Biotek 96-well plate reader) for root-soil enzyme assays.

### University of Connecticut

2010-2012 **Ursula King**- Graduate student. Training in molecular techniques, phylogenetic analysis and data interpretation. Project: Reticulate evolution in the *Najas flexilis*/*N. guadalupensis* complex.

2010-2012 **Hamid Rafizard** - Graduate student. Training in molecular techniques. Project: Phylogeny of the aquatic plant genus *Elatine L.*

2010-2012 **Cassandra Ball** - Undergraduate thesis project. Mentoring on phylogenetic analysis methods and data interpretation.

### University of Oviedo

2007 **Eduardo Cires, PhD** - MSc thesis. Training in molecular methods (RAPDs, AFLPs) Project: Population diversity in *Ranunculus* sp. Last position: Postdoctoral Researcher at the Institute of Science and Technology Austria (IST Austria), Klosterneuburg, Austria

2009 **Marta Mendez** - Undergraduate thesis. Training in molecular methods (RAPDs, AFLPs) Project: Population diversity in fern populations of the North of Spain. Present position: Graduate Student (Neurosciences, University of Oviedo).

2008 **Raquel Folgado, PhD**- Undergraduate thesis. Training in plant culturing and cryopreservation techniques. Present: Cryopreservation Research Fellow at The Huntington, San Marino (CA).

## INVITED SYMPOSIA AND DEPARTMENTAL TALKS

- Invited Speaker Bay Paul Center Seminar (MBL), "Genetic adaptations during habitat transitions in photosynthetic organisms". (Woods Hole, MA, May 2019)
- Invited Speaker: SICB 2019 Integrative Plant Biology Symposium -- Division of Integrative Plant Biology (Tampa, FL, January 2019)
- Invited Speaker The Ecosystems Center Seminars series (MBL) "Habitat transitions in Aquatic plants" (Woods Hole, MA, June 2014)

## SELECTED NATIONAL AND INTERNATIONAL CONFERENCE PRESENTATIONS

- Peredo EL\***, Pérez Castro S\*, Mason O, Vineis J, Bowen J, Mortazavi B, Ruff SE, Paul B, Ganesh A, Giblin AE, Cardon Z. Genomic diversity of uncultured sulfur cycling bacterial communities isolated from rhizosphere sediments in Massachusetts and Alabama salt marshes. Botany 2021, Virtual Conference, 18–23 July 2021.
- Peredo EL\***, Pérez Castro S\*, Mason O, Vineis J, Bowen J, Mortazavi B, Ruff SE, Paul B, Ganesh A, Giblin AE, Cardon Z. Genomic diversity of uncultured sulfur cycling bacterial communities isolated from rhizosphere sediments in Massachusetts and Alabama salt marshes. ASLO, Virtual conference, 22–27 June 2021.
- Peredo EL**, Cardon Z. Downregulation distinguishes desert from aquatic green algal response to desiccation. Botany 2020, Virtual Conference, 27 June, July -3 2020.
- Peredo EL**, Cardon Z. Contrasting responses to desiccation in desert-evolved and freshwater green microalgae. Joint Genome Institute User meeting 2019, San Francisco (California, USA) 3–5 April 2019.
- Peredo EL**, Cardon Z, Thomas S, Bruce D. Genetic bases of desiccation tolerance among independently-evolved desert species within the green algal genus *Scenedesmus*. ESA Annual Meeting, Portland (Oregon, USA), August 6–11, 2017.
- Peredo EL**, Cardon Z, Thomas S, Bruce D. Protecting photosynthesis during desiccation: do the genomes of desert derived and aquatic *Scenedesmus* species hold the key to understanding extreme desiccation tolerance among green algae?. Joint Genome Institute User meeting 2017, Walnut Creek (California, USA) 20–23 March 2017.
- Peredo EL**, Cardon Z, Thomas S, Bruce D. *De novo* transcriptome assembly and gene expression profiling of the desiccation-tolerant desert green alga *Scenedesmus rotundus* during desiccation and rehydration. Botany 2016, Savannah (Georgia, USA) 30 July -3 August 2016.
- Peredo EL**, Cardon Z, Thomas S, Bruce D. Library construction using RNA customized target removal for simultaneous nuclear and organelle expression profiling in species of the green microalgae *Scenedesmus*. Botany 2016, Savannah (Georgia, USA) 30 July -3 August 2016.
- Peredo EL**, Simmons SL. Microscale imaging of microbial communities on *Arabidopsis thaliana* L. leaf surfaces using confocal laser scanning microscopy and fluorescence *in situ* hybridization. ASM Microbe 2016 (American Society of Microbiology), Boston (MA, USA) 16–20 June 2016.
- Peredo EL**, Shapira O, Thomas S, Cardon Z. Photosynthetic response upon rehydration after desiccation is habitat-dependent among species of the algal genus *Scenedesmus*. Eastern Regional Photosynthesis Conference (ERPC) 2015, Woods Hole (MA, USA) 17–19 April 2015.
- Cardon ZG, **Peredo EL**, Thomas S, Shapira O, Bruce D. Photosynthetic capacity persists during multiple desiccation/rehydration cycles in green algae subjected to slow, but not fast, desiccation. Eastern Regional Photosynthesis Conference (ERPC) 2015, Woods Hole (MA, USA) 17–19 April 2015.

- Les DH, **Peredo** EL, King U, Tippery N. In guad we trust? Exposing the real *Najas guadalupensis* (Hydrocharitaceae). Botany 2014. The Boise Centre (ID) 26-30 July 2014.
- King U, **Peredo** EL, Les D. Investigation of genetic variation in *Najas flexilis* using 454 genome sequencing. 5<sup>th</sup> International Conference on Comparative Biology of Monocot. New York 7-13 July 2013.
- Les DH, King U, **Peredo** EL, Benoit L. Adaptive evolution of the chloroplast genome in *Najas* (Hydrocharitaceae) Monocots V. 5<sup>th</sup> International Conference on Comparative Biology of Monocot. New York 7-13 July 2013
- Tippery N, **Peredo** EL, Les D. New taxonomic and biogeographical insights in Nymphoides (Menyanthaceae). Botany 2012, Columbus (OH) 7-11 July 2012.
- Peredo** EL, Les DH, Benoit L, Tippery N. Cryptic speciation in *Najas marina*. Botany 2011, Saint Louis (MO) 9-13 July 2011.
- Les DH, Benoit L, **Peredo** EL, King U. 'Now that is not *Najas*!' a genetic marker for identifying water sprites. Botany 2011, Saint Louis (MO) 9-13 July 2011.
- King U, **Peredo** EL, Les D. Isolation and characterization of microsatellite loci in *Najas flexilis* (Hydrocharitaceae) using 454 genome sequencing. Botany 2011, St Louis (MO) 9-13 July 2011
- Peredo** EL, Cires E, Arroyo-García R, Revilla A. Genetic and epigenetic stability of *Humulus lupulus* after in vitro culture. Scientific Conference of the Int.l Hop Growers Convention, Spain, 21-25 June 2009
- Peredo** EL, Revilla A, Jiménez-Alfaro B, Bueno A, Cires E, Fernández Prieto JA, Abbott R. Applications of molecular markers prior conservation actions on the Spanish endemic *Senecio boissieri*. CRYOPLANET-COST 871 Wakehurst Place, UK, 17-18 February 2009.
- Peredo** EL, Revilla A, Jiménez-Alfaro B, Bueno A, Cires E, Fernández Prieto JA, Abbott R. Population genetic structure and phylogeography of *Senecio boissieri*, a rare Spanish endemic alpine plant. History, Evolution and Future of Arctic and Alpine Flora (British Ecological Society), St Andrews, Scotland, 25-27 June 2007
- Peredo** EL, Reed B, García-Arroyo R, Revilla A. Assessment of genetic stability of cryopreserved and cold stored hop samples. CRYOPLANET-COST 871, Oviedo, April 13-14 2007.
- Peredo** EL, Revilla A, Martínez-Zapater JM, Arroyo-García R. Callus-derived hop plants show correlation between epigenetic instability and time in culture. Scientific Conference of the International Hop Growers Convention, George, South Africa, 20 - 25 February 2005.

## REFERENCES

- 2019- Present-- **David Mark Welch**, Director of the Josephine Bay Paul Center at the Marine Biological Laboratory. 7 MBL Street, Woods Hole, MA 02543-- Phone: (508) 289-7377 E-mail: [dmarkwelch@mbl.edu](mailto:dmarkwelch@mbl.edu)
- 2014- Present-- **Dr. Zoe Cardon**, Marine Biological Laboratory. The Ecosystems Center. 7 MBL Street, Woods Hole, MA 02543-- Phone: (508) 289-7473 E-mail: [zcardon@mbl.edu](mailto:zcardon@mbl.edu)
- 2014- Present-- **Prof. Magdalena Bezanilla**, Dartmouth College, Department of Biological Sciences. The Class of 1978 Life Sc. Center, 78 College St Hanover, NH. E-mail: [magdalena.bezanilla@dartmouth.edu](mailto:magdalena.bezanilla@dartmouth.edu)
- 2012-2014-- **Dr. Sheri Simmons**, Marine Biological Laboratory/ Monsanto Corp. 7 MBL Street, Woods Hole, MA 02543-- Phone: (508) 289-7177 E-mail: [sherisim@gmail.com](mailto:sherisim@gmail.com)
- 2013-2014-- **Prof. Paul Turner**, Yale University, Department of Ecology and Evolutionary Biology. OML 301A, PO Box 208106, New Haven CT 06520--Phone: (203) 432-5918 E-mail: [paul.turner@yale.edu](mailto:paul.turner@yale.edu)



2010-2012-- Prof. Donald Les, University of Connecticut. Department of Ecology and Evolutionary Biology. 75 N. Eagleville Road, Unit 3043, Storrs, CT 06269-3043--Phone: (860) 486-5703 E-mail: [les@uconn.edu](mailto:les@uconn.edu)

2006-- Prof. Richard Abbott, University of Saint Andrews, Scotland. Harold Mitchell Building. University of St Andrews, St Andrews KY16 9TH (UK)--Phone: 01334 463350 E-mail: [rja@st-andrews.ac.uk](mailto:rja@st-andrews.ac.uk)

2002-2008-- Prof. María Ángeles Revilla Bahillo, Universidad de Oviedo, Spain. C/ Catedrático Rodrigo Uría s/n 33071-Oviedo-- E-mail: [arevilla@uniovi.es](mailto:arevilla@uniovi.es)

#### WEBSITES

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