Enrique Celemín Amaro

Personal Information

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Home Address 6350 Colonial Grand Drive

33647 Tampa, FL, United States

Citizenship Spanish

Birth 08.10.1992, Madrid

Education and Research Experience

09.2025 – present	University of South Florida Tampa, United States Postdoctoral researcher at the Department of Integrative Biology
06.2021 – present	Fundación CEQUA Punta Arenas, Chile Research Associate
09.2020 – 03.2025	University of Potsdam Potsdam, Germany PhD candidate at the Institute of Biochemistry and Biology, Unit of Evolutionary Biology/Systematic Zoology
10.2019 – 04.2020	LMU München Munich, Germany Academic exchange, through the Erasmus+ Traineeship Program
08.2018 – 04.2020	Uppsala University Uppsala, Sweden Master's degree in Biology, specialization in Evolutionary Biology
01.2018 - 07.2018	Alfred-Wegener-Institut, Helmholtz Centre for Polar and Marine Research Bremerhaven, Germany Research Assistant at the Functional Ecology Department, Evolutionary Ecology Group
09.2014 – 07.2015	Universidade de Coimbra Coimbra, Portugal Academic exchange, through the Erasmus+ Program
07.2011 – 07.2017	Universidad Rey Juan Carlos Madrid, Spain Bachelor's degree in Biology

Teaching Experience

Bioinformatic Genomics Course (Master's level). (2025, Potsdam University, Germany): Lectures, assistance in laboratory and bioinformatic analysis, correction of reports

Evolutionary Biology Course (Bachelor's level). (2025, Potsdam University, Germany): Substitution lectures on recombination, natural and sexual selection.

Population Genomics Course (Bachelor's level). (2023, Potsdam University, Germany): Lectures, assistance in molecular laboratory and data analysis, correction of reports

Zoology Field Course (Bachelor's level). (2022, Potsdam University, Germany): Lead tour to local Zoo, preparation of ecological assignment, correction of reports

Student Supervision

Master's Thesis: "Locus-specific genotyping of MHC II genes in Magellanic Penguins"

Bachelor's Thesis: "Genotype-Parasite associations: Insights from Harbour porpoises MHC II genes and lungworm infections"

Bachelor's Thesis: "Evolution and organization of MHC class II genes in Cetaceans"

Bachelor's Thesis: "Inference of positive selection in immune-related genes in aquatic mammals"

Master's Thesis: "Locus-specific genotyping of MHC II genes in Harbour Porpoises from North Atlantic and adjacent waters"

Publications

Celemín E, Acevedo J, Acuña-Gómez P, ... & Tiedemann R. (2025) Genomic signatures of migration preference and whaling on Eastern Pacific Humpback whales. *Communications Biology*. In review

Celemín E, Hagberg L, Havenstein K, ... & Tiedemann R. (2025) Genetic basis of adaptation to salinity in Harbour porpoises. *Molecular Biology and Evolution*. In review

Celemín E, Gusev N, Domínguez M, ... & Tiedemann R. (2025) Evolution and organization of MHC II genes in Harbour porpoises: insights from long-read cetacean genome assemblies, whole genome re-sequencing and locus-specific genotyping. *Molecular Ecology*. In press. https://doi.org/10.1111/mec.70006

Domínguez M, **Celemín E**, Gusev N, ... & Tiedemann R. (2025). Comparing amplicon with high fidelity long-read genome sequencing for MHC characterization in the globally threatened passerine *Gubernatrix cristata*. *iScience*, 112301. https://doi.org/10.1016/j.isci.2025.112301

Caccavo JA, Arantes LS, **Celemín E,** ... , Mazzoni CJ. (2024). Whole-genome resequencing improves the utility of otoliths as a critical source of DNA for fish stock research and monitoring. *Molecular Ecology Resources*, 24:e14013. https://doi.org/10.1111/1755-0998.14013

Celemín E, Autenrieth M, Roos A, ... & Tiedemann R. (2023). Evolutionary history and seascape genomics of Harbour porpoises (*Phocoena phocoena*) across environmental gradients in the North Atlantic and adjacent waters. *Molecular Ecology Resources*, 25:e13860. https://doi.org/10.1111/1755-0998.13860

Hagberg L, Celemín E, Irisarri I, ... & Pereira RJ. (2022). Extensive introgression at late

stages of species formation: insights from grasshopper hybrid zones. *Molecular Ecology*, 31: 2384-2399. https://doi.org/10.1111/mec.16406

Conferences and Talks

36th European Cetacean Society Conference. (12-16.05.2025, Ponta Delgada, Portugal). Scientific poster: *Evolutionary history and genetic basis of adaptation of Harbour porpoises (Phocoena phocoena).*

Society for Molecular Biology and Evolution Meeting 2024. (07-11.07.2024, Puerto Vallarta, Mexico). Scientific poster: *Genetic basis of adaptation to salinity on Harbour porpoises (Phocoena phocoena) in the Baltic region*

Society for Molecular Biology and Evolution Meeting 2023. (23-27.07.2023, Ferrara, Italy). Scientific poster: *Evolutionary history and Seascape genomics of Harbour porpoises* (*Phocoena phocoena*) across environmental gradients in the North Atlantic and adjacent waters

2nd Münster Evolution Meeting. (13-16.03.2023, Münster, Germany). Scientific poster: Evolutionary history and Seascape genomics of Harbour porpoises (Phocoena phocoena) across environmental gradients in the North Atlantic and adjacent waters

18th Meeting of the Jastarnia Group, organized by ASCOBANS. (28-30.03.2022, Gothenburg, Sweden). Scientific talk: *Population genomics of Baltic Harbour Porpoises: SNP panel development and WGS*

Evolutionary Biology & Genetics Colloquium. (28.06.2021, Potsdam, Germany). Scientific talk: *Population genomics of Baltic Harbour Porpoises: SNP genotyping with microfluidic arrays and whole genome resequencing*

Field Work Experience

Magellanic Penguin, Patagonian Sea Lion and Humpback Whale sample collection. (15-30.10.2023, Strait of Magellan, Chile)

Magellanic Penguin, Patagonian Sea Lion and Humpback Whale sample collection. (15-30.11.2023, Strait of Magellan, Chile).

King Penguin sample collection. (5-10.12.2023, Tierra del Fuego, Chile)

Volunteer Experience

Intern of the Seal Care Department. (04-07.2017, Seal Rehabilitation and Research Centre, Pieterburen, The Netherlands)

Intern of the Sea Mammal Department. (10.2016-01.2017, Avanqua Oceanográfic-Ágora S.L., Valencia, Spain)

Languages and computing skills

Spanish native speaker

English fluent (IELTS Band Score 7.0, CEFR Level: C1)

Portuguese fluent

German intermediate (A2.2 Goethe Institute Certificate)

R advanced

Unix (HPC) advanced