CURRICULUM VITAE ABREVIADO (CVA)

***IMPORTANT* – The Curriculum Vitae *cannot exceed 4 pages*.**

Part A. PERSONAL INFORMATION

First name	Leire		
Family name	Méndez Fernández		
Gender (*)	Female	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail	leire.mendez@ehu.eus	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-0724-3801	

(*) Mandatory

A.1. Current position

Position	ADJUNTA (AYUDANTE DOCTORA)		
Initial date	01/09/2021		
Institution	University of the Basque Country (UPV/EHU)		
Department/Center	Genetics, Physical Anthropology & Animal Physiology		FCT/ZTF
Country	Spain	Teleph. number	+34 946012712
Key words	animal physiology, ecotoxicology, metal pollution, aquatic invertebrates, water ecosystems, water framework directive, environmental quality criteria, ecosystem services, sustainability.		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
01/01/2009-31/12/2012	PhD Student/UPV/EHU/Spain
03/11/2014-31/12/2014 & 01/05/2015- 30/11/2015	Researcher/ UPV/EHU/Spain
01/03/2016-26/03/2018	PostDoc/ UPV/EHU/Spain
27/03/2018-26/06/2018	Researcher/ UPV/EHU/Spain
03/07/2018-30/06/2019 & 01/11/2019-08/09/2020	Researcher/ UPV/EHU/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Biology Licensed	UPV/EHU/Spain	2007
Msc. Environmental Contamination and Toxicology	UPV/EHU/Spain	2008
PhD. Environmental Contamination and Toxicology	UPV/EHU/Spain	2013
Specialist in Environment and Sustainability	UPV/EHU/Spain	2016

(Include all the necessary rows)

Part B. CV SUMMARY *(max. 5000 characters, including spaces)*

My research career started 14 years ago at the University of the Basque Country (UPV/EHU), Spain, with the focus on the understanding on metal uptake and toxicity of metal mixtures in aquatic ecosystems, and the use of metal bioaccumulation in macroinvertebrates as an ecological monitoring tool. Thus, my master thesis, doctorate and postdoctoral career where developed in this research line, namely ecotoxicology, within the Animal Ecotoxicity and Biodiversity research group. Simultaneously with my research career, I wanted to expand my knowledge and skills in regards to sustainability and ecology, and I completed a postgraduate course in Environment and Sustainability at the UPV/EHU. During this course, I had the opportunity to participate in a collaborative project with different stakeholders to promote sustainability in the city of Bilbao (Basque Country).

In 2018, I was involved in the project of “Ecosystem Services of Euskadi” at the “UNESCO Chair in Environmental Education and Sustainable Development”, from the Dept. Plant Biology

and Ecology (UPV/EHU). I was the responsible of the research line of water ecosystem services, mainly regulation ones, and the development of adequate indicators at different spatial scales, with an applied focus for management purposes under the Water Framework Directive. In 2019, I started working on the RENATUR Interreg Europe project also at the UNESCO Chair, where I conducted different task in order to promote, conserve or raise awareness for biodiversity in peri-urban open spaces of different cities across Europe.

In 2021 I obtained a position as Assistant Professor of Animal Physiology, at the Dept. of Genetics, Physical Anthropology and Animal Physiology in the Sciences Faculty at the UPV/EHU, where I teach Biology for Geologist (1st course) and Environmental Animal Physiology for Biologist (4th course), among other practical lessons of Animal Physiology. Since 2021, I am involved in two projects related with bivalve physiological energetics and ecotoxicological determinations under different stress scenarios (GIU21/028 and PID2022-139616OB-C31/C32/C33), and is now part of the focus of my research line.

Hence, I have a multidisciplinary profile, which allows me to integrate and chief different research lines, from the organism's level towards ecosystem and landscape level, and enables me to make management decisions according to the expected objectives of the projects. Finally, I found myself very interested on the use of different techniques and models in the ecological monitoring of aquatic ecosystems and the ES that they provide, so adequate recommendations are provided to halt biodiversity loss, improve ecosystems management and the promotion of adequate conservation measures.

Finally, here I indicate other relevant merits:

-Publications in web of science (since 2013): 18; Sum of times cited: 293; H-index: 12.

-Stays in R & D Centers (> 1 month)

1. November-December 2016 (2 months): Ecotox Centre-EAWAG-EPFL (Lausanne, Switzerland). Supervisors: Dr. Carmen Casado-Martínez y Dr. Inge Werner.
2. March-May 2012 (3 months): Sphere Lab at the University of Antwerp (Antwerp, Belgium). Supervisor: Prof. Dr. Lieven Bervoets.

-Supervision of Doctoral Thesis and others:

+Supervisor Graduate project 2017/2018: Ibai Martín Aldekoa (7.5/10).

+Supervisor of Exchange student 2019: Diana Riaño (Sept.-Dec 2019).

+Supervisor of Master Thesis project 2020/21: Diana Riaño (Jan.2020-March 2021).

+Supervisor Doctoral Thesis: I. Moreno-Ocio. Start Date: 13/03/2017; End Date: 17-06-2022.

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions)*

1. Moreno-Ocio I., **L. Méndez-Fernández**, M. Martínez-Madrid, N. Costas, I. Pardo, P. Rodriguez. **2022**. Developing As and Cu tissue residue thresholds to attain the good ecological status of rivers in mining areas. Archives of Environmental Contamination and Toxicology, (ISSN: 0090-4341), vol. 82: 379-390. **IF-2021: 3.692**, 5-year IF:3.526; Rank: Environmental Sciences **Q2**, 149/325, percentile: 54.31.

2. Rodriguez P., I. Moreno-Ocio, M. Martínez-Madrid, N. Costas, I. Pardo and **L. Méndez-Fernández**. **2021**. Proposal of integrative scores and biomonitor selection for metal bioaccumulation risk assessment in mine-impacted rivers. Aquatic Toxicology (ISSN: 0166-445X) 238, 105918. **IF-2021: 5.202**; 5-year IF: 5.758. Rank: Marine & Freshwatr Biology Q1, 7/113, percentile: 94.25: Toxicology **Q1**, 17/94, percentile: 82.45.

3. Lobo H., **L. Méndez-Fernández**, P. Rodriguez, M. Martínez-Madrid, M. Daam, E. L.G. Espíndola. **2021**. Bioaccumulation and chronic toxicity of arsenic and zinc in the aquatic oligochaetes Branchiura sowerbyi and Tubifex tubifex (Annelida, Clitellata). Aquatic Toxicology 105955. IF-2019: 4.964; Rank: Toxicology Q1, 17/93

4. Fernández de Manuel B., **L. Méndez-Fernández,** L. Peña, I. Ametzaga-Arregi. **2021.** A new indicator of the effectiveness of urban green infrastructure based on ecosystem services assessment. Basic and Applied Ecology 53: 12-25. **IF-2019: 3.156,** 5-year IF: 2.896; Rank Ecology: **Q1**, 45/168.

5. Peña, L.; Fernández de Manuel, B.; **L. Méndez-Fernández,** Viota, M.; Ametzaga-Arregi, I.; Onaindia, M. **2020.** Co-Creation of Knowledge for Ecosystem Services Approach to Spatial Planning in the Basque Country. Sustainability. IF-2019: 2.576, 5-year IF: 2.798; Rank Environmental Sciences: Q2, 120/265.

6. Pardo I., N. Costas, **L. Méndez-Fernández**, M. Martínez-Madrid and P. Rodríguez, **2020**. Changes in invertebrate community composition allow for consistent interpretation of biodiversity loss in ecological status assessment. Science of the Total Environment 715: 136995. **IF-2019: 6.551,** 5-year IF: 6.419; Rank Environmental Sciences: **Q1**, 22/265,

7. Arambourou H., L. Llorente, I. Moreno-Ocio, O. Herrero, C. Barata, I. Fuertes, N. Delorme, **Méndez-Fernández L.**, R. Planelló, **2020.** Exposure to heavy metal-contaminated sediments disrupts gene expression, lipid profile, and life history traits in the midge *Chironomus riparius*. Water Research 168: 115165; **IF-2020: 11.236**; 5-year IF: 13.847; Rank Environmental Sciences: **Q1**, 6/274, percentile: 97.99.

8. **Méndez-Fernández L.**, C. Casado-Martínez, M. Martínez-Madrid, I. Moreno-Ocio, N. Costas, I. Pardo and P. Rodriguez, **2019**. Derivation of sediment Hg Quality Standards based on ecological assessment in river basins. Environmental Pollution 245: 1000-1013. **IF-2019: 6.792**, 5-year IF: 6.939; Rank Environmental Sciences: **Q1**, 21/269, percentile: 90.20.

9. Costas N., I. Pardo, **L. Méndez-Fernández**, M. Martínez-Madrid and P. Rodríguez, **2018**. Sensitivity of macroinvertebrate indicator taxa to metal gradients 1 in mining areas in Northern Spain. Ecological Indicators 93: 207-218. **IF-2018: 4.490,** 5-year IF: 4.863; Rank Environmental Sciences: **Q1**, 45/250.

10. Rodríguez P., **L. Méndez-Fernández,** I. Pardo, N. Costas, M. Martínez-Madrid, **2018**. Baseline tissue levels of trace metals and metalloids to approach ecological threshold concentrations in aquatic macroinvertebrates. Ecological Indicators 91: 395-409. **IF-2018: 4.490,** 5-year IF: 4.863; Rank Environmental Sciences: **Q1**, 45/250, percentile: 82.20.

11. Fernández-Marín B., F. Míguez, **L. Méndez-Fernández**, A. Agut, J.M. Becerril, J.I. Garcia-Plazaola, I. Kranner, L. Colville. **2017**. Seed carotenoid and tocochromanol composition of wild Fabaceae species is shaped by phylogeny and ecological factors. Frontiers in Plant Science 8, 1428. **IF-2017: 3.677**, 5-year IF: 4.353; Rank Plant Science: **Q1**, 24/223.

12. **Méndez-Fernández L.,** M. Martínez-Madrid, I. Pardo, P. Rodríguez. **2017**. Baseline tissue concentrations of metal in aquatic oligochaetes: Field and laboratory approaches. Environmental Pollution 223: 636-643. **IF-2017: 4.358**, 5-year IF: 5.291; Rank Environmental Sciences: **Q1**, 40/242, percentile: 83.678.

13. **Méndez-Fernández L.,** P. Rodríguez, M. Martínez-Madrid. **2017**. Cadmium bioaccumulation in aquatic oligochaetes using a biodynamic model: a review of values of physiological parameters and model validation using laboratory and field bioaccumulation data. Reviews of Environmental Contamination and Toxicology: 1-24. **IF-2017: 7.000**, 5-year IF: 5.495; Rank Environmental Sciences: **Q1**, 10/242, percentile: 96.074; Rank Toxicology: **Q1**, 3/94, percentile: 97.340.

14. Lobo H., **L. Méndez-Fernández**, M. Martínez-Madrid, M. Daam, E. L.G. Espíndola. **2016**. Acute toxicity of zinc and arsenic to the warmwater aquatic oligochaete *Branchiura sowerbyi* as compared to its coldwater counterpart *Tubifex tubifex* (Annelia, Clitellata). Journal: Journal of Soils and Sediments, 16: 2766–2774. **IF-2016: 2.522**, 5-year IF: 2.703; Rank Environmental Sciences: **Q2**, 85/229.

15. Rubio I., M. Martínez-Madrid, **L. Méndez-Fernández,** A. Galarza, P. Rodríguez. **2016**. Heavy metal concentration in feathers of Little Egrets (*Egretta garzetta*) in three coastal breeding colonies in Spain. Journal: Ecotoxicology 25: 30-40. **IF-2016: 2.329**; 5-year IF: 2.779; Rank Environmental Sciences: **Q2**, 81/225.

16. **Méndez-Fernández L.,** P. Rodríguez and M. Martínez-Madrid. **2015**. Sediment Toxicity and Bioaccumulation Assessment in Abandoned Copper and Mercury Mining Areas of the Nalón River Basin (Spain). Journal: Archives of Environmental Contamination and Toxicology 68: 107-123. **IF-2015: 2.039**; 5-year IF: 2.164; Rank Environmental Sciences **Q2**, 100/225, percentile: 55.778.

17. **Méndez-Fernández L.,** M. De Jonge and L. Bervoets. **2014**. Influences of sediment geochemistry on metal accumulation rates and toxicity in the aquatic oligochaete *Tubifex tubifex.* Journal: Aquatic Toxicology 157: 109-119. **IF-2014: 3.451**; 5-year IF: 4.113; Rank Marine & Freshwater Biology: **Q1**, 5/103, percentile: 95.631.

18. **Méndez-Fernández L.,** M. Martínez-Madrid and P. Rodríguez. **2013**. Toxicity and Critical Body Residues of Cd, Cu and Cr in the aquatic oligochaete *Tubifex tubifex* (Müller)

based on lethal and sublethal effects. Journal: Ecotoxicology 22: 1445-1460. **IF-2013: 2.500**, 5-year IF: 3.191; Rank Environmental Sciences: **Q2**, 71/216, percentile: 67.361.

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)
I have participated in a total of 29 international and national meetings (14 Oral and 15 poster). Here I show the last 5 oral presentations where I was the presenter:
1. Busturia. 2019. I Congreso Internacional Construyendo puentes entre la Ciencia y la Gestión. Investigación para la sostenibilidad en Reservas de Biosfera. Aportaciones a la Agenda de Sostenibilidad 2030**.** Metodologías de evaluación de los Servicios de los Ecosistemas acuáticos en la Reserva de la Biosfera de Urdaibai. **L. Méndez-Fernández**, B. Fernández de Manuel, L. Peña, I. Ametzaga, M. Onaindia.
2. Lisboa. 2019. 15th European Ecological Federation (EEF) Congress and 18th National SPECO Meeting. Freshwater regulating Ecosystem Services in Urdaibai´s Biosphere Reserve: an Integrated Approach. **L. Méndez-Fernández**, B. Fernández de Manuel, L. Peña, M. Onaindia.
3. Almadén. 2019. II Simposio Nacional del Mercurio. Metodología para el desarrollo de criterios de calidad de Hg en sedimento. **L. Méndez-Fernández,** I. Moreno-Ocio, M. Martínez-Madrid, N. Costas, I. Pardo, P. Rodriguez.
4. Geneva. 2017. 10th International SedNet Conference. Stepwise approach for the derivation of sediment quality criteria at different spatial scales: case study of mercury contamination in river basins from North Spain. **L. Méndez-Fernández,** C. Casado-Martínez, M. Martínez-Madrid, I. Pardo, N. Costas, P. Rodriguez.
5. Brussels. 2017. 27th SETAC Europe Annual Meeting. Metal bioaccumulation assessment in macroinvertebrates and relationships to benthic community quality state in a mining region. **L. Méndez-Fernández,** M. Martínez-Madrid, I. Pardo, N. Costas, I. Moreno-Ocio, P. Rodriguez.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.
1. Project Title: **MITOYSTER**-Impacto de la contaminación en la bioextracción de la ostra: Solucion basada en la Naturaleza para la laguna del Mar Menor. Financial body: Agencias Estatal de Investigación, Quantity: 111. 000€; Duration:01/01/2023-21/12/2026; PI-UPV/EHU: Irrintzi Ibarrola, PI-Coord: Marina Albentosa.
2. Project Title: "**Ecofisiología y Ecotoxicología de organismos acuáticos**". Financial body: UPV/EHU (GIU21/028).Quantity:74.250€;Duration:01/01/2022-31/12/2025.PI: Irrintzi Ibarrola.
3. Project Title: "**Fisiología del crecimiento de moluscos bivalvos**". Financial body: UPV/EHU (GIU20/064). Quantity: 24.000 €; Duration: 01/01/2021-31/12/2023. PI: Miren Begoñe Urrutia.
4. Project Title: "**Life via de la plata**". Climate change adaptation in the heritage city of Salamanca (ES): ecosystem services, green infrastructure and big data**".** Financial body: LIFE Program (LIFE19 CCA/ES/001188); Quantity: 2,861,101€; Duration: 2020-2023; PI-UPV/EHU: I. Ametzaga; PI-Coordinator EPE patronato municipal de vivienda y urbanismo del Excmo. Ayuntamiento de Salamanca
5. Project Title: "**Renatur".** Financial body: INTERREG Europe (PGI05798); Quantity: 1,516,546.000€; Duration: 2019-2023; PI-UPV/EHU: I. Ametzaga; PI-Coordinator Martin Luther University Halle-Wittenburg: M. Spyra
6. Project Title: "**Ecotoxicidad animal y Biodiversidad**". Financial body: UPV/EHU; Quantity: 16.000€; Duration: 2017-2018; PI: P. Rodriguez.
7. Project Title: "**Bioacumulación de metales pesados en invertebrados del bentos y su relación con alteraciones ecológicas en tramos fluviales afectados por actividades mineras**". Financial body: MINECO (CGL2013-44655-R); Quantity: 95.000€; Duration: 2014-2017; PI: P. Rodríguez.
8. Project Title: "**Ecotoxicidad Animal**". Financial body: Gobierno Vasco (IT-405-10); Quantity: 65.000€; Duration: 2010-2012; PI: P. Rodríguez.
9. Project Title: "**Toxicidad Crónica de Sedimentos Fluviales en Localidades de las Redes de Vigilancia de la Calidad de las Aguas y Evaluación de la Bioacumulación de Metales en Tubifex tubifex (Annelida:Clitellata)**".Financial body: MEC (CGL2008-04502/BOS); Quantity: 54.000€; Duration: 2009-2011; PI: P. Rodríguez .