

Part A. PERSONAL INFORMATION

CV date 01/07/2022

First and Family name	Urtzi Izagirre		
Social Security, Passport, ID number		Age	
Researcher numbers	Researcher ID	C-3848-2017	
	Orcid code	0000-0002-3477-4974	

A.1. Current position

Name of University/Institution	University of the Basque Country (UPV/EHU)		
Department	Zoology and Animal Cell Biology		
Address and Country	Barrio sarriena S/N, 48940 Leioa, Spain		
Phone number	946018449	E-mail	urtzi.izagirre@ehu.eus
Current position	Assistant professor	From	2017
Espec. cód. UNESCO	2407		
Palabras clave	biomarkers, pollution monitoring, ecosystem health indices, marine, estuarine, climate change, animal comparative histology, histopathology, immunohistochemistry, quantitative microscopy, natural variability		

A.2. Education

PhD	University	Year
European PhD in Cell Biology	UPV/EHU	2008
PhD extraordinary prize	UPV/EHU	2008

A.3. JCR articles, h Index, thesis supervised...

Supervised PhDs: 5 (Eur/Intnl) + 1 (Eur/Intnl) ongoing

N. publications in Q1: 47 (out of 56)

H index: 19

Part B. CV SUMMARY (max. 3500 characters, including spaces)

Assistant professor at the University of the Basque Country (UPV/EHU) in the Cell Biology Area of Zoology and Animal Cell Biology Dpt. (2017-). Member of the Cell Biology and Environmental Toxicology Consolidated research group of the UPV/EHU (2001-). In charge of the experimental aquatic unit of the Research Centre for Experimental Marine Biology and Biotechnology (Plentzia Marine Station) since its creation in 2011. Coordinator of Comparative Histology course in the Biology Degree of UPV/EHU, and the course Fish and Shellfish Reproduction in the Erasmus Mundus MSc in Marine Environment and Resources (MER; MEC Quality Award, 2008-2012). Basque Government predoctoral fellowship (2001-2005). European PhD Thesis with extraordinary award "Contribution to the interpretation of lysosomal biomarkers in marine organisms based on the mechanistic understanding of the lysosomal responses to pollutants" at the University of the Basque Country (2008). Pre-doctoral studies at the "Bioimaging Laboratory" of the University of Wales (Aberystwyth) in electron microscopy. Expertise: Toxicology, Bioassays, Pollution monitoring, Biomarkers, Natural variability, lysosomal biomarkers, Immuno-histology and histopathology, tissue-arrays. Supervised 29 Degree research works, 23 Master Thesis. 56 articles, 22 book chapters/proceeding, >138 international conferences. 52 projects (3, Principal investigator) + 28 research contract (17, Principal investigator). Member of Scientific societies: (SICTA, ESCPB, SETAC).

Part C. RELEVANT MERITS

C.1. Publications (including books)

- Laura DeMiguel-Jimenez, Nestor Etxebarria, Helena C. Reinardy, Xabier Lekube, Ionan Marigomez, Urtzi Izagirre. (2022) Toxicity to sea urchin embryos of crude and bunker oils weathered under ice alone and mixed with dispersant Marine Pollution Bulletin 175,113345



- Blanco-Rayón E, Ivanina IV, Sokolova IM, Marigómez M, Izagirre U (2020) Sex and sex-related differences in gamete development progression impinge on biomarker responsiveness in sentinel mussels. *Science of the Total Environment* 740: 140178
- Briaudeau T, Zorita I, Cuevas N, Franco J, Marigómez I, Izagirre U (2019) Multi-annual survey of health status disturbance in the Bilbao estuary (Bay of Biscay) based on sediment chemistry and juvenile sole (*Solea spp.*) histopathology. *Marine Pollution Bull* 145,126–137
- Lekube X, Izagirre U, Soto M, Marigomez I (2014) Lysosomal and tissue-level biomarkers in mussels cross-transplanted among four estuaries with different pollution levels. *Science of the Total Environment* 472, 36–48
- Izagirre U, Errasti A, Bilbao E, Múgica M, Marigómez I (2014) Combined effects of thermal stress and Cd on lysosomal biomarkers and transcription of genes encoding lysosomal enzymes and HSP70 in mussels, *Mytilus galloprovincialis*. *Aquatic Toxicology*, 149, 145–156
- Izagirre U, Gamendia L, Etxeberria N, Soto M, Margómez I (2014) Health status assessment through an integrative biomarker approach in mussels of different ages with a different history of exposure to the Prestige oil spill. *Science of the Total Environment* 493: 65–78
- Brooks SJ, Farmen E, Sorlie Heier M, Blanco-Rayon E, Izagirre U (2015) Differences in copper bioaccumulation and biological responses in three *Mytilus* species. *Aquatic Toxicology* 160 (2015) 1-12
- Mugica M, Izagirre U, Marigomez I. (2015) Lysosomal responses to heat-shock of seasonal temperature extremes in Cd-exposed mussels. *Aquatic Toxicology* 164: 99-107
- Eguiraun H, Izagirre U, Martinez I. (2015) A paradigm shift in safe seafood production: From contaminant detection to fish monitoring - Application of biological warning systems to aquaculture. *Trends in Food Science & Technology*. 43: 104-113
- Ziarrusta H, Mijangos L, Izagirre U, Plassmann MM, Benskin JP, Anakabe E, Olivares M, Zuloaga O (2017) Bioconcentration and Biotransformation of Amitriptyline in Gilt Head Bream. *Environ. Sci. Technol.* 51 (4): 2464–2471
- Jimeno-Romero A, Izagirre U, Gilliland D, Warley A, Cajaraville MP, Marigómez I, Soto M. (2017) Lysosomal responses to different gold forms (nanoparticles, aqueous, bulk) in mussel digestive cells: a trade-off between the toxicity of the capping agent and form, size and exposure concentration. *Nanotoxicology*, DOI: 10.1080/17435390.2017.1342012

C.2. Research projects and grants: Participation in 52 project, 3 as principal investigator

Title: Red de varamientos y rescate de especies marinas de Euskadi e incorporación de muestras al biobanco de la UPV/EHU.

Funding entity: Fundación Biodiversidad.

Date: (23/05/2022-31/12/2025)

Participation: Researcher

Principal Researcher: Manu Soto

Amount: 354.502,37 €

Title: Enfoque multiescala para identificar (micro)plásticos y entender su transporte, impacto, distribución e interacción con elementos traza en sedimentos. PlastMer

Funding entity: Ministerio de ciencia e innovación

Date 01/09/2021-31/08/2025

Principal Researcher: Manu Soto and Urtzi Izagirre

Amount: 254.100,00 €

Title: Grupo consolidado de Investigación Tipo A: BCTA "Biología Celular en Toxicología Ambiental +"

Funding entity: Departamento de Educación, Universidades e Investigación del Gobierno Vasco

Date: 01/01/2007-31/12/2025



Participation: Researcher
Principal Researcher: Maren Ortiz-Zarragoitia
Amount: 1.600.000 €

Title: Towards science-based standard biomarker methods, suitable to diagnose and monitor pollution biological effects in the Bay of Biscay for the purpose of implementing the European Marine Strategy Framework Directive (BMW) MICINN12/190
Funding entity: Ministerio de Economía y Competitividad
Date: 01/01/2013-31/12/2015
Participation: Researcher
Principal Researcher: Ionan Marigómez
Amount: 180.000 €

Title: Integrated oil spill response actions and environmental effects (GRACE)
Funding entity: H2020
Date: 01/03/2016-31/12/2019
Participation: Researcher
Principal Researcher: Ionan Marigómez
Amount: 350.000 €

Title: Nuevas perspectivas sobre las amenazas ecotoxicológicas latentes que plantean los sedimentos estuarinos crónicamente contaminados SEaDIMENTOX.
Funding entity: Ministerio de Economía y Competitividad. MINECO
Date: 01/01/2018- 31/12/2020
Participation: Researcher
Principal Researcher: Manu Soto & Ionan Marigómez
Amount: 205.700€

Title: Investigación estratégica de las propiedades, aplicaciones y efectos de los nanomateriales poliméricos. ELKARTEK 2021 KK-2021/00001.
Funding entity: Gobierno Vasco.
Date: 27/02/2021-26/02/2023
Participation: Researcher
Principal Researcher: Urtzi Izagirre
Amount: 123.843,23 €

C.3. Contracts Participation in 28 research contract, 17 as principal investigator.

Title: Contrato de trabajo entre Norwegian Institute for Water Research (NIVA) y Departamento de Zoología y Biología Celular Animal
Funding entity: Norwegian Institute for Water Research (NIVA)
Date: 01/01/2009-01/04/2011
Participation: Researcher
Principal Researcher: Ionan Marigómez (Grupo BCTA, UPV/EHU)
Amount: 20.180 €

Title: Estudios de toxicidad del glifosato en mejillón *Mytilus galloprovincialis* dentro de la actuación de eliminación de *Baccharis halimifolia* en el marco del proyecto "life + estuarios del País Vasco Funding entity IHOBE
Date: 01/06/2011-30/06/2012
Participation: Researcher
Principal Researcher: Manu Soto (Grupo BCTA, UPV/EHU)
Amount: 18.000 €

Title: Histological and biochemical analysis of cod liver samples
Funding entity: Norwegian Institute for Water Research (NIVA)
Date: 01/03/2012-31/08/2012
Principal Researcher: Urtzi Izagirre
Amount: 9.000 €



Title: Asesoramiento científico en el proyecto INGURUSYSTEM: Estudio de los índices de salud medioambiental y parametrización
Funding entity: NORAY BIOINFORMATICS, S.L.
Date: 01/07/2013-31/12/2013
Principal Researcher: Urtzi Izagirre (Grupo BCTA, UPV/EHU)
Amount: 12.000 €

Title: Asesoría científica para el proyecto INGURUSYSTEM (GAITEK): Validación funcional versión final de la plataforma informática.
Funding entity NORAY BIOINFORMATICS, S.L
Date 01/07/2014-31/12/2014
Principal Researcher Urtzi Izagirre (Grupo BCTA, UPV/EHU)
Amount: 10.000 €

Title Tissue distribution and biological effects of microplastics in marine mussels (PIASTinMUSS)
Funding entity Swedish Museum of Natural History
Date 01/01/2015-31/12/2015
Participation: Researcher
Principal Researcher Ionan Marigómez (Grupo BCTA, UPV/EHU)
Amount: 75.000 €

Title Measurements of Nitrosomyoglobin and Myoglobin in Tuna (MYOTUNA)
Funding entity New England Sea Food NTL
Date 01/11/2016-30/04/2017
Participation: Researcher
Principal Researcher Urtzi Izagirre
Amount: 9.000 €

C.4. Patents

- Patente internacional PCT/ES2012/070343 "Método para la identificación del sexo en peces" de la UPV/EHU. Fecha solicitud: 14/05/2012. OEPM Madrid.
- Patente española ES 2 398 811 A2 "Método para la identificación del sexo en peces II" de la UPV/EHU. Fecha publicación de la solicitud: 21/03/2013. OEPM Madrid.
- Modelo de utilidad: "Equipo para la determinación del síndrome de carne quemada en un pescado" BIOLAN MICROBIOSENSORES S.L., Número Registro: U202230273; 18/2/2022 Ref: LAN005. OEPM Madrid.

C.5, C.6, C.7... (e. g., Institutional responsibilities, memberships of scientific societies...)

- Coordinator of the degree course (Comparative Histology) 16/03/2011-31/12/2017
- Coordinator of the MER Master course (Fish and Shellfish Reproduction) since 2013
- In charge of the management works inside the project of the Experimental Marine Biology and Biotechnology Research Centre of Plentzia (PIE-UPV/EHU) especially in the design, development and construction of the experimental aquarium 01/05/2008-17/07/2012
- In charge of the water biology experimentation unit of the Experimental Marine Biology and Biotechnology Research Centre of Plentzia (PIE-UPV/EHU) since 17th July 2012
- Member of the aquaculture advisory board-AKUIBATZAR of the Basque Government since its constitution, 28th November 2014.
- Member of the "Ethics Committee on Animal Experimentation" of the UPV/EHU. Since 02/11/2020