

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	IBON		
Family name	CANCIO		
Gender (*)	MALE	Birth date	03/03/1969
ID number	30616453A		
e-mail	Ibon.cancio@ehu.eus	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0003-4841-0079	

A.1. Current position

Position	Full Professor		
Initial date	2000 (as Full Profesor 21/10/2022)		
Institution	UNIVERSITY OF THE BASQUE COUNTRY (UPV/EHU)		
Department/Center	ZOOLOGY & ANIMAL CELL BIOLOGY	PLENTZIA MARINE SATION (PiE- UPV/EHU)	
Country	SPAIN	Teleph. n	946017670
Key words	Biomarkers, transcriptomics, histology, endocrine disruption, sex differentiation in fish, research infrastructures		

A.2. Previous positions

Period	Position/Institution/Country/Interruption cause
1993-1998	PhD grant (Basque Government)
1998-2000	Post-doc contract Basque Government
25/01/2000-16/10/2008	Lecturer (Profesor Asociado, UPV/EHU)
17/10/2008-20/10/2022	Associate Professor (UPV/EHU)

A.3. Education

BSc in Biology	University of the Basque Country	1992
MSc in Biological Electron Microscopy	University of Wales (Aberystwyth, UK)	1993
European PhD in Biology	University of the Basque Country	1998

A.4. JCR articles, h Index, thesis supervised...

JCR Articles total = 71 (80% Q1 in Environmental Sciences)

- 62,5% published with international collaborators as coauthors
- 150 co-signing co-authors
- 10 papers as first author and 21 papers as last author
- 24 citations in 23 policy documents internationally (Sage Policy Profiles): Governments of Spain, Norway, Canada, USA, UNESCO...

Number of citations received = 2296 (Scopus)

h Index = 27 (Scopus)

Master Theses supervised: 17

PhD Theses supervised: 8 (7 international) + 2 ongoing

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

Full Professor in Cell Biology in UPV/EHU. Coordinator of the official Master in "Environmental Contamination & Toxicology" (2012-2020). Researcher in the consolidated research group "Cell Biology & Environmental Toxicology+-One-Health", Basque Government.

Director of the Spanish node of the European Research Infrastructure EMBRC-ERIC (www.embrc.eu, European Marine Biology Resource Center) within the ESFRI roadmap and Director of its Spanish node.

Responsible for ABS issues of PiE-UPV/EHU.

Research lines: Cell & Molecular Biology of fish sex differentiation & Applications of Cell Biology in Toxicology (toxicogenomics, pollution biomarkers, endocrine disruption).

Teaching activity initiated in 2000. Participated in student and staff exchange programs (Erasmus/Socrates network) and in funded projects for EU Curriculum Development to

generate open distance learning packages. Co-responsible for the organization of the Erasmus European Class Bilbao 2003.

Research stays at Universities of Wales (1992-1993), Amsterdam (1994) and Heidelberg (Germany, 1995-1996), Fisheries Research Service (Scotland, 2001) and Catholic Univ. of Leuven (Belgium, 2002), with more than three years research experience abroad. He has supervised 17 Master theses and 8 PhD theses (7 of them International + 2 ongoing).

9 book chapters, 71 papers in international peer-reviewed journals, 9 in national ones. 2nd (2007) and 3rd (2006) CAF-Elhuyar prizes to best manuscripts in Science-didactics in Basque.

Over 85 invited conferences and seminars, for instance at Katholieke U. Leuven, Center for Environment, Fisheries & Aquaculture Science (Weymouth, UK); U. Thessaloniki, U. de Santiago de Compostela, National Institute of Bioinformatics (CNIO), Colegio Mayor Miguel de Unamuno; AZTI-Tecnalia, ARCTOS colloquium: Akvaplan-NIVA, (Tromsø); CIC-Biogune, Glasgow Caledonian U., U. Exeter, U. Helsinki, Natural History Museum of Copenhagen, UPV/EHU Science Week 2017 & 2018, Scientific address to the 17/18 promotion (46th) of students of the School of Science & Technology, 25th Annual Newth lecture (Oban, Scotland), 2023 EMBL Spain alumni meeting. Invited to deliver the opening lecture in the celebrations of the 150th anniversary of the Station Biologique de Roscoff (Univ Sorbonne & CNRS). Extensive outreach activity nationally (scientific stands, exhibitions, radio, TV...).

Participation in 68 research projects. Main researcher in provincial, regional, national and EU research projects. PI of four consecutive Spanish research program projects. Presently participating in 4 Horizon EU projects (leads a WP in one), and in an Interreg Atlantic Arc project (lead a WP).

Evaluates research projects for Lieverhulme Trust, French Ifremer, Italian and Greek Govs. Certification to work with experimental animals in the laboratory, including direction of projects using experimental animals

Responsible for the 38 days stay and research collaboration of the TREC Expedition of the EMBL in PiE-UPV/EHU, Sept-Oct 2023.

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

C.1. Publications

JCR articles (10 selected contributions; Total publications in ISI Web of Know.= 71)

- 1.- Diaz de Cerio O; Rojo-Bartolomé I; Bizarro C; Ortiz-Zarragoitia M. **Cancio I.** 5S rRNA and accompanying proteins in gonads: powerful markers to identify sex and reproductive endocrine disruption in fish” ENVIRON. SCI. TECHNOL. 46: 7763-7771 (2012)
- 2.- Ortiz-Zarragoitia M. Diaz de Cerio O; Rojo-Bartolomé I; Bizarro C; Cajaraville M.P. **Cancio I.** Mugilid fish are sentinels of exposure to endocrine disrupting compounds in coastal and estuarine waters. Mar. Drugs 12: 4756-4782 (2014)
- 3.- Rojo-Bartolomé I; Diaz de Cerio O; Díez G. & Cancio I. Identification of sex and female's reproductive stage in commercial fish species through the quantification of ribosomal transcripts in gonads. Plos ONE 11(02): e0149711 (2016)
- 4.- Diaz de Cerio O, Bilbao E, Izagirre U, Etxebarria N, Moreno G, Díez G, Cajaraville MP, **Cancio I.** Toxicology tailored low density oligonucleotide microarray for the thicklip grey mullets (*Chelon labrosus*): Biomarker gene transcription profile after caging in a polluted harbour. Mar Environ Res. 140:265-277 (2018).
- 5.- Rahdari, A; Yarmohammadi, M; rtiz-Zarragoitia, M; Lokman, P.M; Akhavan, S.R; Diaz de Cerio, O; **Cancio, I**; Falahatkar, B. The effects of 11-ketotestosterone implants on transcript levels of gonadotropin receptors, foxl2 and dmrt1 genes in the previtellogenic ovary of cultured beluga (*Huso huso*). J. FISH BIOL. 97: 374-382 (2020).
- 6.- Rojo-Bartolomé I; de Souza J.E.S., Diaz de Cerio O; **Cancio I.** Duplication and subfunctionalization of the general transcription factor IIIA (gtf3a) gene in teleost genomes, with ovarian specific transcription of gtf3ab. PLOS ONE, 15: e0227690 (2020).
- 7.- Scholz, A.H; Lange, M; Habekost, P; Oldham, P; **Cancio, I**; Cochrane, G; Freitag, J. Myth-busting the provider-user relationship for digital sequence information. GIGASCIENCE 10, 1-8, (2021).
- 8.- Scholz, A.H; Freitag, J; Lyal, C.H.C; Sara, R; Cepeda, M.L; **Cancio, I** et al., Multilateral benefit sharing from digital sequence information will support both science and biodiversity conservation. NATURE COMMUNICATIONS 13:1086 (2022).

- 9.- Nzioka, A; Madeira, M.J., Kokokiris, L; Ortiz-Zarragoitia, M., Diaz de Cerio, O; **Cancio, I.** Lack of genetic structure in euryhaline *Chelon labrosus* from the estuaries under anthropic pressure in the Southern Bay of Biscay to the coastal waters of the Mediterranean Sea. MAR. ENVIRON. RES. (2023) 189: 106058
- 10.- Bir, J; Rojo-Bartolomé, I; Lekube, X; Diaz de Cerio, O; Ortiz-Zarragoitia, M; **Cancio, I.** High production of transfer RNAs identifies the presence of developing oocytes in ovaries and intersex testes of teleost fish. MAR. ENVIRON. RES. (2023) 186: 105907.

Chapters in books (total 9) and other publications

- 1.- **Cancio, I.** In: Manual de Técnicas de Microscopía Electrónica (MET) Aplicaciones Biológicas (Eds. L Megías & J Renau-Piqueras) Edited Univ. Granada pp:129-143 (1998).
- 2.- Zaldibar, B; **Cancio, I**; Soto, M; Marigómez, I; & Dussart, GBJ. In: "Slugs & Snails: Agricultural, Veterinary & Environmental Perspectives", (Ed. GBJ. Dussart) British Crop Protection Council Symposium Proceedings. Vol 80 pp: 269-274 (2003).
- 3.- Marigómez, I. Soto, M. **Cancio, I.** Orbea, A. & Cajaraville, M.P. In: Oceanography and Marine Environment of the Basque Country, Chapter 14, (Eds. A. Borja & M. Collins), Elsevier Oceanography Series, Amsterdam, pp: 335-364 (2004).
- 4.- Werding, R. Izagirre, U. **Cancio, I.** Orbea, A. Marigómez, I. & Cajaraville, M.P. In: "Oceanography of the Bay of Biscay" (Eds. I. Alvarez, M. deCastro, M. Gómez-Gesteira, MN. Lorenzo & R. Prego), Aica ediciones, pp: 235-238 (2006).
- 5.- Bilbao, E; Soto, M; Cajaraville, M.P; **Cancio, I**; & Marigómez, I. "In: "Biological Effects of Contaminants in Marine Pelagic Ecosystems" (Eds. K. Hylland; T. Lang; D. Vethaak), SETAC press, pp: 121-141 (2006).
- 6.- Bilbao, E; Ibabe, A; Zaldibar, B; Soto, M; Cajaraville, M.P; **Cancio, I**; & Marigómez, I. In: "Biological Effects of Contaminants in Marine Pelagic Ecosystems", (Eds. K. Hylland; T. Lang; D. Vethaak), SETAC press, pp: 215-234 (2006).
- 7.- Marigomez I, Soto M, Izagirre U, Ortiz-Zarragoitia M, Mugica M, Garmendia L, Corby S, Errasti A, **Cancio I**, Orbea A, Bilbao, E, Cajaraville MP et al. In: "Cambio climático: impacto y adaptación/Klima aldaketa: inpaktua eta egokitzea" (Eds. O. Santa Coloma, E. Feliú, M. Mendizabal) Gobierno Vasco; ISBN 978 84 457 3175 8 pp 51-63 (2011).
- 8.- Piña M, Colas P, **Cancio I**, Audic A, Bosser L, Canario A, Johnston I, Kervella AE, Kooistra W, Merciecca M, Nardello I, Pade N, Robinson D, Shoen A, Kloareg B. "The European Marine Biological Resource Infrastructure Cluster, an alliance of European research infrastructures to promote the blue bio-economy" In: "Grand Challenges in Biol & Biotechnol" (Ed. Trincone; Rampelotto), Springer Ver ISBN 9783319690742 pp:405-21 (2018).
- 9.- Gras, S, Pade N, Kloareg B, **Cancio, I.** Developing research in maritime regions through innovation ecosystems. OPEN ACCESS GOV., 204: 342-343 (2019) ISSN 2516-3817.

C.2. Congress, 164 international communications and 27 national

- .- First or last author in 99 communications, Poster 88, Platforms 93 (Invited plenaries 5)
- .- Attendance to 49 congresses, Member of the scientific committee in 10 international congresses and Member of organization committee of 4 international congresses
- .- President of the 14th congress of the Iberian Society of Comparative Endocrinology (AIEC2023), Bilbao, Sept 2023.

C.3. Research projects (selection of 10 projects since 2015)

- 1.- Identificación molecular del sexo, del estadio reproductor y de la fecundidad en peces de interés comercial: mecanismos, aplicaciones y explotación-SEXOVUM. REF: AGL2012-33477. Funding body: Spanish MINECO. **Main Researcher**. Budget: 93.600 € (2013-2015).
- 2.- Implementación de la infraestructura de investigación europea European Marine Biological Resources Centre-EMBRC en la estación marina de Plentzia. REF: PIE EMBRC DFB15/01. Funding Body: Diputación Foral Bizkaia. **Main Researcher**. Budget: 227.000 € (2015-2016).
- 3.- Grupo consolidado de Investigación Tipo A: BCTA "Biología Celular en Toxicología Ambiental" REF: IT810-13. Funding body: Department of Education, Universities and Research, Basque Government. **Researcher**. Budget: 491.998€ (2013-2018)
- 4.- European Marine Biology Resource Centre preparatory phase 2-pp2-EMBRC. REF: INFRADEV -2-201515/01. Funding body: EU-H2020 (H2020-INFRADEV -2-201515/01). **Main Researcher**. Budget: 71.000 €. UPV/EHU (2015-2016)

- 5.- Desarrollo oocitario en peces; diferenciación y maduración hacia la fecundación vs la atresia-ATREoVO. REF: AGL2015-63936-R. Funding body: Spanish Ministry MINECO. **Main Researcher.** (Co-PI: M. Ortiz) Budget: 169.400 € (2016-2018)
- 6.- Association of European marine biological laboratories expanded-ASSEMBLE PLUS. Code H2020 INFRAIA-01-2016-2017. Funding body: European Commission (H2020 INFRAIA-01-2016-2017). **Main Researcher in UPV/EHU and leader WP on sustainability.** Budget: UPV/EHU and UVigo Spanish partners 739.672,33 € (2018-2022)
- 7.- European Marine Biological Resource Centre Biobank-EBB. Interreg Atlantic Area. **Main Researcher in UPV/EHU and leader WP6.** Budget 184.000€ (2017-2021).
- 8.- Population structure of the catadromous thicklip grey mullet (*Chelon labrosus*) and consequences in gonad differentiation due to xenoestrogen exposure in Southern Bay of Biscay estuaries. (BORN2bEGG). REF: PGC2018-101442-B-I00. Funding body: Spanish Ministry of Science, Innovation and Universities. Role in project: **Main Researcher.** (Co-PI: M. Ortiz-Zarragoitia) Budget: 177.870 € (+1 PhD contract) (2019-2022).
- 9.- Transnational R&D&I cooperation network to foster the competitiveness and sustainability of the Blue Biotech sector in the Atlantic Area territory-MARINNONET. **REF:** HE-INFRA23/01. Funding body: Interreg Atlantic Arch **Main Researcher in UPV/EHU and leader WP3.** Budget: 264.500 € (2023-2026).
- 10.- Research Infrastructure Services for Sustainable Aquaculture, Fisheries and the Blue Economy -AquaServ. **REF:** HE-INFRA23/01. Funding body: EU, Horizon-Europe. **Main Researcher in UPV/EHU and leader WP6.** Budget: 355.250 € (2024-2028).

C.4. Contracts, technological or transfer merits, Selected contracts

- 1.- Estudio estado ecológico entorno de descarga Punta Lucero. PETRONOR, S.A. 3.250.000 pts (2001)
- 2.- North Sea Water Column Monitoring Project-2003. NORISK HYDRO. 28.503,29 € (2003)
- 3.- North Sea Water Column Monitoring Project-2004. NORISK HYDRO. 7.725,39 € (2004)
- 4.- Seguimiento efectos del Prestige en las islas Cies y Ons mediante uso de biomarcadores de contaminación. Centro Investigaciones Submarinas CIS, S.L. 58.464 € (2004-2006).
- 5.- Toxic action of molluscicides: the effect of the application mode. De Sangosse (register nº in France 300 163 896). 63.000 euros (2011-2012).
- 6.- Implementación de la RI europea EMBRC en la estación marina de Plentzia. REF: PIE EMBRC. FB15/01. Diputación Foral de Bizkaia. 227.000 €. (2015-2016).
- 7.- Zientziakide Science citizen program for eDNA analysis of ichthyological diversity in schools. ELHUYAR Fundazioa. Budget 4.250 € (2017).
- 8.- eDNA for the identification of PKD parasite & intermediate host in a rainbow trout facility. NUSI. 5.400 € (2019).

National Spanish Patents (2)

Patent ES2392604 (A1) and Patent ES2398811A2 Method for identifying the sex of fish.
Inventor(s): Cancio I et al. **Classif:** C12Q1/68-cooperative: C12Q1/6879; C12Q1/6888 and C12Q 1/68 (2006.01). **Application n:** WO2012ES70343 20120514 and P 201230651 (9).
Priority n(s): ES20110030778 20110513.

C.5 Institutional and scientific responsibilities

- 1.- Coordinator of the Official Master program in “Environmental Contamination and Toxicology” (UPV/EHU) since 2012 till 2020.
- 2.- Director of the Spanish Node of the ESFRI roadmap research infrastructure European Marine Biology Resource Center, EMBRC-ERIC.
- 3.- Member of the “Aquaculture Advisory Board” of the Basque Government (AKUIBATZAR). Elaboration of the strategic plan 2014-2020 in aquaculture of the Basque Autonom. Region.
- 4.- Elected member General Board in Science & Tech. Faculty (UPV/EHU) since June 2020.
- 5.- Member of the international “DSI Scientific Network”: <https://www.dsmz.de/collection/nagoya-protocol/digital-sequence-information/dsi-scientific-network>

C.6 Scientific societies

- .- Sociedad Española de Biología Celular and ECBO. Member of Sociedad Ibérica de Contaminación y Toxicología Ambiental, of Society of Environmental Toxicology & Chemistry, of Universidad Vasca de Verano/Udako Euskal Unibertsitatea (UEU).
- .- Member of the board of the Iberian Society of Comparative Endocrinology (AIEC)