



Part A. PERSONAL INFORMATION

CV date 24-10-2022

First and Family name	BEÑAT ZALDIBAR ARANBURU		
Social Security, Passport, ID number		Age	
Researcher numbers	Researcher ID	6507840442	
	Orcid code	0000-0002-5528-451X	

A.1. Current position

Name of University/Institution	University of the Basque Country		
Department	Zoology and Animal Cell Biology		
Address and Country	Barrio Sarriena s/n E-48940. Leioa. Spain		
Phone number	946012696	E-mail	benat.zaldibar@ehu.eus
Current position	Profesor Agregado	From	08/10/2013
Espec. cód. UNESCO	2407		
Palabras clave	biomarcadores, seguimiento de la contaminación, índices de salud de ecosistemas, moluscos, histología, histopatología, histoquímica, microscopía cuantitativa		

A.2. Education

PhD	Universidad	Year
BsC Biología	Universidad del País Vasco	1999
PhD Biología celular	Universidad del País Vasco	2006

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

Research 6-yr terms: 2
Supervised PhDs (since 2005): 2 (2016 Y 2022)
Total N. citations (Scopus 29/01/2018): 482
N. publications in Q1 (Scopus 29/01/2018): 17 (out of 28)
H index (Scopus 23/06/2017): 14

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

Beñat Zaldibar Aranburu obtained the Degree in Biology (Microbiology) in 1999 at the University of the Basque Country (UPV/EHU). He started his research in the Department of Zoology and Animal Cell Biology at the UPV/EHU in 1996 where he earned a Ph D. degree (Cell Biology) in 2006. From July 2006 until March 2007 he worked at the Department of zoology and Animal Cell Biology as researcher. Since January 2007 until March 2007 he worked as associated lecturer in the Department of at the Department of Teaching of Mathematics and Environmental Sciences at the Teaching school of the UPV/EHU. Since March 2007 until October 2013 he worked as associated lecturer at the department of Zoology and Animal Cell Biology at the UPV/EHU. Since October 2013 he is a lecturer at the department of Zoology and Animal Cell Biology at the UPV/EHU. His research activity has focused in the study of cell renewal and histopathological alterations associated with exposure to contaminants in molluscs and the study of cell and tissue level biomarkers of molluscs in both aquatic and soil environments. He has participated in over 30 national and international research projects and contracts and has published 26 research papers in indexed journals of high quality. It also has publications in national journals and book chapters. He is also author of a book. He has made stays in leading research centers like Politecnica delle Marche (Ancona, Italy, 2006) and the Centre for Environment, Fisheries and Aquaculture Science (Weymouth, UK, 2010). He has more than 60 communications in national and international congresses. Moreover, in terms of teaching, has developed its activity on topics related to cell biology, from 2007/2008. From the academic year 2008/2009 onwards he teaches graduate international official masters and is currently codirector of a master. It has three publications on teaching materials and has presented two communications in International Congresses on teaching. He has also been involved in two Teaching projects (one as a director). He



has directed or co-directed 8 Master Thesis and 16 Degree Ending works.

Part C. RELEVANT MERITS

Los méritos aportados se pondrán en orden cronológico inverso dentro de cada apartado. Salvo en casos de especial importancia para valorar su CV, se incluirán únicamente los méritos de los últimos 10 años

C.1. Publications (including books)

Urionabarrenetxea, E., Garcia-Velasco, N., Zaldibar, B., & Soto, M. (2022). Impacts of sewage sludges deposition on agricultural soils: Effects upon model soil organisms. *Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology*, 255 doi:10.1016/j.cbpc.2022.109276

von Hellfeld, R., Zarzuelo, M., Zaldibar, B., Cajaraville, M. P., & Orbea, A. (2022). Accumulation, depuration, and biological effects of polystyrene microplastic spheres and adsorbed cadmium and benzo(a)pyrene on the mussel *mytilus galloprovincialis*. *Toxics*, 10(1) doi:10.3390/toxics10010018

Louzon, M., Pauget, B., Gimbert, F., Morin-Crini, N., Wong, J. W. Y., Zaldibar, B., . . . de Vaufleury, A. (2021). In situ and ex situ bioassays with *cantareus aspersus* for environmental risk assessment of metal(loid) and PAHcontaminated soils. *Integrated Environmental Assessment and Management*, doi:10.1002/ieam.4480

Abdou, M., Zaldibar, B., Medrano, R., Schäfer, J., Izagirre, U., Dutruch, L., Coynel, A., Blanc, G., Soto, M. 2020. Organotropism and biomarker response in oyster *Crassostrea gigas* exposed to platinum in seawater. *Environmental Science and Pollution Research*, 27 (4), pp. 3584-3599.

Buldain, I., Pellon, A., Zaldibar, B., Antoran, A., Martin-Souto, L., Aparicio-Fernandez, L., Areitio, M., Mayayo, E., Rementeria, A., Hernando, F.L., Ramirez-Garcia, A. 2019. Study of humoral responses against *Lomentospora/scedosporium* spp. And *aspergillus fumigatus* to identify *L. prolificans* antigens of interest for diagnosis and treatment. *Vaccines*, 7 art. no. 212.

Benito, D., Ahvo, A., Nuutinen, J., Bilbao, D., Saenz, J., Etxebarria, N., Lekube, X., Izagirre, U., Lehtonen, K.K., Marigómez, I., Zaldibar, B., Soto, M. 2019. Influence of season-dependending ecological variables on biomarker baseline levels in mussels (*Mytilus trossulus*) from two Baltic Sea subregions. *Science of the Total Environment*, 689, pp. 1087-1103.

Aguirre-Rubí, J., Luna-Acosta, A., Ortiz-Zarragoitia, M., Zaldibar, B., Izagirre, U., Ahrens, M.J., Villamil, L., Marigómez, I. 2018. Assessment of ecosystem health disturbance in mangrove-lined Caribbean coastal systems using the oyster *Crassostrea rhizophorae* as sentinel species. *Science of the Total Environment*, 618, pp. 718-735. DOI: 10.1016/j.scitotenv.2017.08.098

Abdou, M., Dutruch, L., Schäfer, J., Zaldibar, B., Medrano, R., Izagirre, U., Gil-Díaz, T., Bossy, C., Catrouillet, C., Hu, R., Coynel, A., Lerat, A., Cobelo-García, A., Blanc, G., Soto, M. 2018. Tracing platinum accumulation kinetics in oyster *Crassostrea gigas*, a sentinel species in coastal marine environments. *Science of the Total Environment*, 615, pp. 652-663. DOI: 10.1016/j.scitotenv.2017.09.078

Rementeria, A., Mikolaczyk, M., Peña, A., Lancelleur, L., Blanc, G., Soto, M., Schäfer, J., Zaldibar, B. In press. Assessment of health status of oysters (*Crassostrea gigas*) exposed to environmentally relevant concentrations of Ag and Cu in brackish waters. *Journal of sea research*. 130: 229-238. DOI: 10.1016/j.seares.2017.04.013

Luna-Acosta, A., Bustamante, P., Thomas-Guyon, H., Zaldibar, B., Izagirre, U., Marigómez, I. 2017. Integrative biomarker assessment of the effects of chemically and mechanically dispersed crude oil in Pacific oysters, *Crassostrea gigas*. *Science of the Total Environment* 598: 713-721. DOI: 10.1016/j.scitotenv.2017.04.001.

Garcia-Velasco, N., Peña-Cearra, A., Bilbao, E., Zaldibar, B., Soto, M. 2017. Integrative assessment of the effects produced by Ag nanoparticles at different levels of biological complexity in *Eisenia fetida* maintained in two standard soils (OECD and LUFA 2.3). *Chemosphere* 181: 747-758. DOI: 10.1016/j.chemosphere.2017.04.143.

Rementeria, A., Mikolaczyk, M., Lancelleur, L., Blanc, G., Soto, M., Schäfer, J., Zaldibar, B. 2016. Assessment of the effects of Cu and Ag in oysters *Crassostrea gigas* (Thunberg, 1793) using a battery of cell and tissue level biomarkers. *Marine Environmental Research* 122: 11-22. DOI: 10.1016/j.marenvres.2016.09.002.



Rodríguez-Iruretagoiena, A., Rementeria, A, Zaldibar, B, de Vallejuelo, S.F., Gredilla, A, Arana, G, de Diego, A. 2016. Is there a direct relationship between stress biomarkers in oysters and the amount of metals in the sediments where they inhabit?. *Marine Pollution Bulletin* 111: 95-105. DOI: 10.1016/j.marpolbul.2016.07.025.

Mleiki, A., Irizar, A., Zaldibar, B., El Menif, N.T., Marigómez, I. 2016. Bioaccumulation and tissue distribution of Pb and Cd and growth effects in the green garden snail, *Cantareus apertus* (Born, 1778), after dietary exposure to the metals alone and in combination. *Science of the Total Environment*. 547: 148-156. DOI: 10.1016/j.scitotenv.2015.12.162.

Mikolaczyk M; Rementeria A; Lancelleur L; Schäfer J; Petit JC; Zaldibar B; Chiffoleau JF; Soto M, Marigomez I; Blanc G. 2016. Silver and copper bioaccumulation kinetics in oyster *Crassostrea gigas* tissues at environmentally relevant exposure levels using stable isotope spikes. *Estuarine and Coastal Shelf Science* 179: 135-144. DOI: 10.1016/j.ecss.2015.07.025.

Rodríguez-Ruiz A, Asensio V; Zaldibar B; Soto M; Marigómez I. 2014. Toxicity assessment through multiple endpoint bioassays in soils posing environmental risk according to regulatory screening values. *Environmental science and Pollution research*. 21: 9689-9708. DOI: 10.1007/s11356-014-2915-7.

Brooks S; Zaldibar B; Harmen C; Izaguirre U; Tormod G; Marigomez I. 2011. Integrated biomarker assessment of the effects exerted by treated produced water from an onshore natural gas processing plant in the North Sea on the mussel *Mytilus edulis*. *Marine Pollution Bulletin* 62: 327-339.

Zaldibar B; Cancio I; Soto M; Marigomez I. 2008. Changes in cell-type composition in digestive gland of slugs and its influence in biomarkers following transplantation between a relatively unpolluted and a chronically metalpolluted site. *Environmental Pollution* 156: 367-379.

Zaldibar B; Cancio I; Marigomez I. 2008: Epithelial cell renewal in the digestive gland and stomach of mussels: Season, age and tidal regime related variations. *Histology and Histopathology* 23: 281-290.

Zaldibar B; Cancio I; Marigomez I. 2007: Reversible alterations in epithelial cell turnover in digestive gland of winkles (*Littorina littorea*) exposed to cadmium and their implications for biomarker measurements. *Aquatic Toxicology* 81: 183-196.

Zaldibar B; Cancio I; Soto M; Marigomez I. 2007. Digestive cell turnover in digestive gland epithelium of slugs experimentally exposed to a mixture of cadmium and kerosene. *Chemosphere* 70: 144-154.

Zaldibar B; Rodrigues A; Lopes M; Amaral A; Marigómez I; Soto M. 2006. Freshwater molluscs from volcanic areas as model organisms to assess adaptation to metal chronic pollution. *Science of the Total Environment* 371: 168-175.

Zaldibar B; Cancio I; Marigomez I. 2007. Circatidal variation in epithelial cell proliferation in the mussel digestive gland and stomach. *Cell and Tissue Research*. 318: 395-402.

C.2. Research projects and grants

Last 5 years. (over 10.000,00 €)

Title: Investigación estratégica de las propiedades, aplicaciones y efectos de los nanomateriales poliméricos

Funding entity: Gobierno Vasco

Date 27/02/2021-31/12/2022

Participation: Researcher

Principal Researcher: Urtzi Izaguirre Aramayona (Grupo BCTA, UPV/EHU)

Amount: 123.843,23 €

Title: KONTRAE - Emergencia y diseminación de resistencias a los antibióticos: Vínculos entre salud humana, ganadería, alimentación y medio ambiente

Funding entity: Gobierno Vasco

Date 01/01/2020-31/12/2021

Participation: Researcher

Principal Researcher: Manu Soto (Grupo BCTA, UPV/EHU)

Amount: 39.187,20 €

Title: Avanzando en la aplicación de estrategias innovadoras de fitogestión en zonas contaminadas del espacio Sudoe

Funding entity: CE

Date 01/11/2020-30/04/2023



Participation: Researcher
Principal Researcher: Manuel Soto (Grupo BCTA, UPV/EHU)
Amount: 44.437,50 €

Title: Enfoque múltiescala para identificar (micro)plásticos y entender su transporte, impacto distribución e interacción con elementos traza

Funding entity: Ministerio de Ciencia e Innovación

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

Participation: Researcher

Principal Researcher: Manuel Soto & Urtzi Izaguirre (Grupo BCTA, UPV/EHU)

Amount: 254.100,00 €

C.3. Contracts

Highlights

Estudio del estado ecológico del entorno de la descarga en Punta Lucero. Campañas 2018, 2019, 2020:

IP: Jose María Gorostiaga. 95.683,01 €

Estudio de la toxicidad derivada de la deposición de fangos de depuradora en suelos del vertedero 17 (gernika-lumo): efectos biológicos en flora y fauna

IP: SOTO LOPEZ, MANUEL . 11.570,25

Título del contrato: Estudio del estado ecológico del entorno de la descarga en Punta Lucero. Campañas 2015, 2016, 2017

IP: GOROSTIAGA GARAY, JOSE MARIA. 91.737,80

Toxic action of molluscicides: the effect of the formulation 2015.

IP: ZALDIBAR ARAMBURU, BEÑAT. 13.000,00

C.4. Patents

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

Elected member of the Faculty Board at the Faculty of science and Technology in the UPV/EHU.

Erasmus + programme coordinator for the degree of "Biology"